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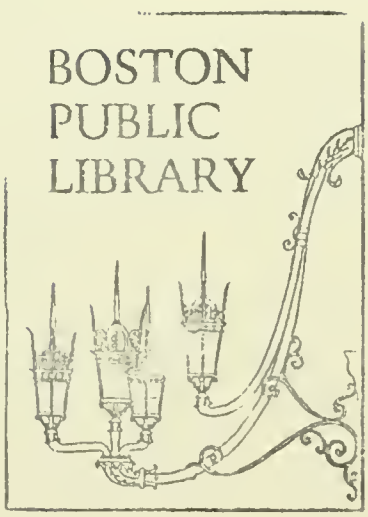
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MAGUIRE GROUP

STATEMENT OF QUALIFICATIONS

FOR

PIER 3

CHARLESTOWN NAVY YARD

MAGUIRE GROUP

STATEMENT OF QUALIFICATIONS

FOR

PIER 3

CHARLESTOWN NAVY YARD

MAGUIRE GROUP

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Maguire Group Inc.
Architects/Engineers/Planners
60 First Avenue
Waltham, Massachusetts 02254
Telephone 617/890-0100

February 5, 1988

MAGUIRE GROUP

Mr. Paul Reavis
Assistant Director for Engineering
and Design Services
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201

RE: Request for Qualifications - Pier 3, Charlestown Navy Yard

Dear Mr. Reavis:

Maguire Group Inc. is pleased to have an opportunity to submit our qualifications relative to the design, engineering and support services for the rehabilitation of Pier 3 in Charlestown. Our team of professionals brings indepth knowledge of marine design issues, as well as an acute understanding of the issues surrounding the development of such facilities in and around the City of Boston. All of the team members have had direct experience in developing and designing projects similar to Pier 3.

Over the past few years we have worked on Massport Marine Terminals, EDIC's Pier 10 rehabilitation, North Jetty rehabilitation, Town of Saugus Lobsterman Landing, Mystic Connecticut Historic Seaport, Norfolk, Virginia Waterside Marina and Wavescreen, and Bath Iron Works, Portland, ME just to name a few.

Most recently, we have completed the design of the roll-on/roll-off facilities at Deer Island for the Massachusetts Water Resources Authority. These facilities will accommodate the transfer of personnel and equipment for the construction of wastewater treatment facilities at Deer Island.

All of our projects have taken into consideration the need for the thorough coordination and communication with relevant regulatory agencies. In addition, each project required significant attention be paid to abutting uses and consideration given to both historic and landscape related issues.

We intend to utilize the resources of J. Walter Brain Associates (for landscaping) and Chan Lin Associates (structural) on this assignment. Both firms are well qualified minority business enterprises with whom we have successfully worked in the past. They bring an added dimension

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to our team. Walter Brain Associates have won awards from the Massachusetts Department of Environmental Management for work on Spectacle Island and Chan Lin Associates have consistently proven their capabilities as structural engineers.

Mr. Klaus Schoellner, P.E. will lead our team. A senior member of Maguire Group Inc., Klaus has either managed, designed or coordinated major marine related projects throughout the country. His experience and understanding of marine engineering, as well as his working knowledge of environmental constraints and regulatory procedures, makes him an ideal candidated to manage the Pier 3 project.

Maguire Group Inc. has, over the past twenty years, successfully completed major design and engineering assignments for the Redevelopment Authority. Our staff has worked closely with you and are very familiar with the relevant administrative and contractural obligations of the BRA. We welcome the opportunity to work with you on this challenging assignment and are confident that the services we provide will result in the successful completion of the project.

Please do not hesitate to contact me, or any other of the Maguire staff identified in this proposal, should you have any questions. Again our thanks for your courtesy and consideration.

Sincerely,

Thomas A. Tilas
Maguire Group Inc.

CHAPTER I

AFFIRMATIVE ACTION COMPLIANCE PROGRAM

POLICY STATEMENT

Maguire Group Inc. is committed on a voluntary basis, to take affirmative steps to implement equal opportunity in employment. Our efforts in this regard have been continuous in the hiring and upgrading of minorities and women.

In 1968 the Office of Federal Contract Compliance issued regulations requiring Affirmative Action Compliance Programs applicable to firms doing business with the Government. Therefore, in addition to our previous voluntary efforts, we have undertaken a Corporate Affirmative Action Compliance Program in order to increase materially the utilization of minorities and women at all levels and in all segments of our work force.

The Rehabilitation Act of 1973 and the Vietnam Era Veterans Readjustment Assistance Act of 1974 also require affirmative action for handicapped persons, disabled veterans, and veterans of the Vietnam Era. Accordingly, throughout this policy statement, minorities, women, handicapped persons, disabled veterans, and veterans of the Vietnam Era are referred to as protected classes.

Written programs are required and since they provided an effective guide to future action and a measure of actions taken, all domestic establishments of Maguire Group Inc. are required as a matter of policy to develop written Affirmative Action Compliance Programs in accordance with the following guidelines:

I. Objectives - Affirmative action calls for positive, aggressive and effective steps to attract job applications from protected classes; to hire those who are trainable; to conduct training programs to prepare employees for future advancement; and to advance those who are qualified without regard to race, creed, color, sex, age, national origin, handicap, or veteran's status. Affirmative action also calls for the training of supervisory and management personnel in the effective supervision and management of all employees with emphasis on the particular problems in the supervision and management of protected classes.

II. Requirements - In order to implement an effective Affirmative Action Compliance Program, it is necessary that the problems inherent in the employment of protected classes be identified and analyzed in any written program, and the opportunities for the utilization of protected classes be evaluated and emphasized. The Program,

therefore, will provide in detail for specific steps to guarantee equal employment opportunity keyed to the needs of protected classes in general and to the particular circumstances of each locality. The Program will also include the development of specific goals and timetables, where required, for the achievement of full and equal employment opportunity.

III. Evaluation - The Affirmative Action Compliance Program at each location will provide on a continuous basis: (a) an analysis of protected class employees, where required, in all job categories, (b) an analysis of all employment practices to determine whether equal employment opportunity is being afforded in all job categories, (c) an evaluation of recruitment sources as to their effectiveness in referring qualified protected class candidates.

IV. Implementation - In order to implement our Affirmative Action Compliance Program, each establishment's Program shall include the following provisions as they apply to the particular location: (a) establish methods to increase the number of protected class applicants for employment. This is to include, but not be limited to:

1. All present sources of job candidates will be urged to refer qualified protected class applicants.

2. Employment advertising will continue to include a statement reflecting our Company's status as "An Equal Opportunity Employer," in addition, we will utilize protected class oriented media as vehicles for employment advertising.

3. We will continue to encourage protected class employees to refer their qualified friends and relatives for job vacancies.

4. We will continue our efforts in recruiting at colleges likely to produce protected class candidates.

5. Protected class students will be sought for inclusion in summer employment programs.

6. We will continue to work closely with national and local organizations as sources of qualified protected class applicants.

(b) Actively seek and consider qualified protected class employees on an equal basis with other qualified employees whenever a promotional opportunity becomes available. (c) Base decisions on employment solely upon the individual's qualifications for the position to be filled. (d) Make promotional decisions solely upon the individuals qualifications as related to the requirements of the position to be filled. (e) Insure that all other personnel matters such as hiring, compensation, benefits, transfers, layoffs, returns from layoffs, Company-sponsored training, education, tuition assistance, social and recreational programs, are administered in accordance with the laws regarding the employment of protected classes.

V. Responsibility - Line management will be responsible for the administration of the Program as required by the circumstances of each establishment. Through responsible subordinates managerial personnel will: (a) Set goals, where required, that are significant, measurable and attainable. These goals shall specifically provide for the correction of underutilization, if any, of protected classes. (b) Identify problem areas by department, location, job classification, etc., and take remedial action. (c) Conduct periodic reviews of the progress made under the Affirmative Action Compliance Program.

VI. Corporation Coordination - The Company's total Program is to be coordinated through the office of the Vice President, Director of Personnel at the Providence, Rhode Island office.

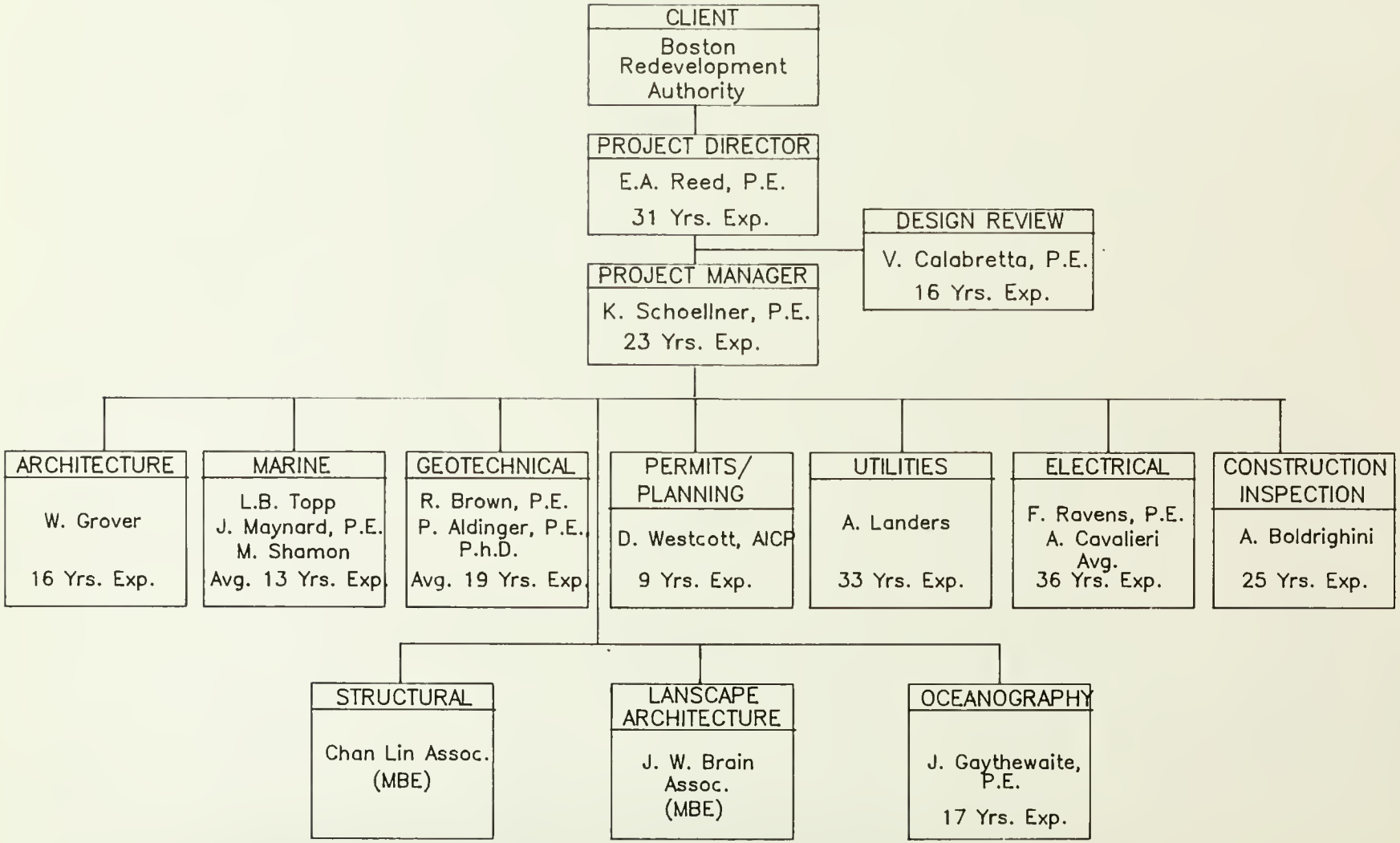
VII. The intent of our Affirmative Action Compliance Program is to implement and accelerate equal opportunities for all employees and applicants for employment. Our management, at all levels, is required to make every good faith effort to achieve this intent.

January 2, 1988

Vincent M. Cangiano
President

MAGUIRE
GROUP

PROJECT TEAM ORGANIZATION
PIER 3 – CHARLESTOWN NAVY YARD



KEY TEAM MEMBER QUALIFICATIONS

The following is a summary of the qualifications of key Maguire project team members. Each member of the team has extensive experience in the design of marine and waterfront facilities.

E. ALLEN REED, P.E.
DIRECTOR OF ENGINEERING

PROJECT ASSIGNMENT:	PROJECT DIRECTOR
EXPERIENCE:	31 Years
EDUCATION:	B.S. - Civil Engineering

Mr. Reed has extensive experience and involvement in numerous marine related projects, including the design of piers, bulkheads, marinas, shore protection and other waterfront projects. He has been Project Manager for numerous civil engineering projects including dams, waterworks and flood control projects, designs for harbor and channel alignments and dredging. He has also been engaged in various site and land development projects.

Recently his project experience, as project manager, has included an in-depth study of various ore handling improvements for the export of minerals at four ports in Peru for the U.S. Agency for International Development; and the rehabilitation of more than four miles of steel sheet pile bulkheads at the Naval Air Station, Midway Islands.

Mr. Reed's relevant marine project experience includes the following.

* Pier Design, Deer & Nut Islands, Boston, MA

* Berthing Facilities, Portsmouth, NH: Enlargement of berthing facilities for the State of New Hampshire.

* Port of Providence, RI: Rehabilitation of wharf and deepening of berths.

* Waterfront Improvements, Naval Air Station, Quonset Point, RI: Bulkhead and various waterfront improvements.

* Thames River, CT: Project manager for the widening and deepening of the Thames River.

* New London Submarine Base, Groton, CT: Pierside dredging and upgrading of utility systems.

* U.S. Coast Guard Academy, New London, CT: Land reclamation and waterfront improvements.

* District One Coast Guard Base, Boston, MA: Bulkhead repair.

KLAUS SCHOELLNER, P.E.
CIVIL/MARINE GROUP MANAGER

PROJECT ASSIGNMENT:	PROJECT MANAGER
EXPERIENCE:	23 Years
EDUCATION:	Diplom Engineer, Berlin, Germany

Mr. Schoellner has extensive experience in projects ranging from waterfront, to building structures. He has worked internationally in the Middle East, Africa, and Germany, as well as along the East Coast from New Hampshire to South Carolina.

His marine project experience includes the following.

* Town Pier, Hingham, MA
* Lobsterman's Landing, Saugus, MA
* Pier IO Rehabilitation, EDIC, Boston, MA
* Deer & Nut Islands Pier Design, Boston, MA
* Winter Island Pier Design, Salem, MA
* Nantucket Ferry Terminal, Nantucket, MA
* Mystic Wharf Extension, Boston, MA
* Charles River Dam, Boston, MA
* Misc. Petrochemical Facilities, Ports and Pipelines, Iran
* New Marine Terminal for Massport, South Boston, MA
* Harborfront Improvements Study, Beverly, MA
* Seafood Industrial Park, Newport News, VA
* Pope's Island Marina Preliminary Design, New Bedford, MA
* New Ocean Terminal, Onne, Nigeria: Design, review and construction supervision services.

VICTOR V. CALABRETTA, P.E.
V.P., DIRECTOR OF PORT/MARINE OPERATIONS

PROJECT ASSIGNMENT:	Design Review
EXPERIENCE:	16 Years
EDUCATION:	M.S. - Civil Engineering B.S. - Civil Engineering

Mr. Calabretta currently serves as Regional Manager for the Northeast Operation, which encompasses the states of Maine, New Hampshire, Massachusetts and Rhode Island, and includes Maguire's Pacific Basin Operation. His expertise is in the field of Marine and Heavy Civil design. He began as a junior engineer with Maguire in 1972 and advanced to his current position through involvement in some of the largest projects undertaken by the firm throughout the United States, as well as internationally in South America, Africa and the Far East.
A representative listing of Mr. Calabretta's marine project experience is included below.

* Eastport Waterfront Seawalls, Eastport, ME: Designs for waterfront facilities being installed as part of the City's downtown redevelopment program and serving fishing and commercial marine activities.

* Norwich Municipal Marina, Norwich, CT: Comprehensive services from initial feasibility studies through design and construction management services for this 250-slip marina located at the confluence of the Thames, Yantic and Shetucket Rivers. The marina includes a condominium complex and other commercial spaces.

* Taylor's Point Marina, Bourne, MA: Design and construction management services for a 155-slip marina including floating docks, fueling piers, bulkheads, riprap and all utilities.

* Waterside Wave Screen, Timber Walkway and Marina, Norfolk, VA: Designs for a 750-foot long wave screen and a 50-slip transient marina for the City of Norfolk's downtown revitalization project.

* Marine Dynamics Marina and Shipyard, Somerset, MA: Engineering feasibility and marketing study for the development of a marina and marine repair facility.

* Davisville Pier Extensions, RI: Condition survey and analysis of piers for design and construction of a new fender system.

* Bald Head Island Marina, Cape Fear, NC: Engineering feasibility study and design for the development of a marina, an entrance channel protective jetties, harbor configuration, bulkheads and docking facilities.

* Newport News Seafood Industrial Park, Newport News, VA: Waterfront improvements to this industrial park, including bulkheading, breakwaters and jetties.

WILLIAM G. GROVER, AIA
SENIOR ARCHITECT

PROJECT ASSIGNMENT:	Architectural Design
EXPERIENCE:	16 Years
EDUCATION:	B.S. - Architecture

Mr. Grover has extensive experience in a wide variety of design projects. He has served as project manager or project architect on major projects such as:

* The New Jersey Center for Advanced Biotechnology and Medicine, New Brunswick, New Jersey; preparation of concept document including preliminary programming to be used for funding approval.

* A 25,000 seat, world class Olympic stadium for University of Bagdad, Bagdad, Iraq.

* American Twin Office Complex - Adaptive reuse of 1800's mill building in East Cambridge, Massachusetts. Building registered with the Massachusetts Historical Commission.

* Shopping Center, Boca Raton, Florida.

* Fine Arts Center in Provincetown. First place in regional design competition. Magus Center for the Performing and Visual Arts. 400 seat theater addition to a Samuel McIntire Federalist House, circa 1809, Salem, Massachusetts.

* Alan M. Vorhees Computing Center, Rensselaer Polytechnic Institute, Troy, New York. Adaptive reuse of 1930 Gothic/Romanesque church for main computer facility.

* Mount St. Vincent extended care facility, Mount St. Vincent Convent, Wellesley, Massachusetts; 80 unit, 4 level nursing home.

* HUD 5-60, 56 unit low cost housing, South Miami, Florida, Winner of South Florida AIA Design Award.

* Frick Chemistry Laboratory, Princeton University, Princeton, New Jersey; feasibility study, renovations and additions to chemistry complex.

LEONARD TOPP
SENIOR MARINE ENGINEER

PROJECT ASSIGNMENT:	Marine Engineer
EXPERIENCE:	17 Years
EDUCATION:	B.S. - Mechanical Engineering

Mr. Topp has advanced from a junior engineer to his present position as senior engineer/project manager on large port, waterfront and water resource assignments for Maguire. His duties have included design administration, cost estimating, project specifications, construction coordination, computer programming for engineering and business use, and management of assigned projects.

Mr. Topp's marine facility design experience has included bulkheads, shore protection, fender systems, pier and wharf rehabilitation, and marina design and layout. A representative list of his projects follows.

* Taylor's Point Marina, Bourne, MA: Design and construction management services for a 155-slip marina including floating docks, fueling piers, bulkheads, riprap utilities.

* Norwich Municipal Marina, Norwich, CT: Comprehensive services from initial feasibility studies through design and construction management for this 250-slip marina and condominium complex.

* Alava and Rivera Wharves, Subic Bay, Philippines: Repairs of waterfront facilities at the Navy's largest Pacific ship repair facilities. The project included site inspection of the wharf to determine and evaluate the causes of its differential settlement and large scale reinforced concrete structure repair/replacement.

* Pier No. 2, Davisville, Rhode Island: Design and installation of 150 ton storm bollards and fender system.

Mr. Topp was also involved with marine design for Coddington Cove, Newport, RI; Melville Pier; Davisville Pier for the RI Port Authority; and Sand Island Bulkheads.

As a certified diver, Mr. Topp has coordinated and participated in the underwater inspection and surveys of numerous facilities through the United States. His project background includes provision of services for the following projects.

* Ammunition Port Facility, Apra Harbor, Guam: Site reconnaissance and carrier inspection at this major new port.

* Truman Annex Naval Base, Key West Florida Redevelopment Agency, Key West, FL.

JOHN K. MAYNARD, P.E.
SENIOR MARINE ENGINEER

PROJECT ASSIGNMENT:	Marine Engineer
EXPERIENCE:	16 Years
EDUCATION:	B.S. - Civil Engineering

Mr. Maynard's marine/waterfront project experience is extensive, and has included design of numerous facilities involving both shallow and deep draft port structures and associated land support systems, roadways, utilities and shore protection structures. Marine designs have included new construction, repair and renovation of both anchored and cantilevered bulkheads with concrete, steel and timber sheeting; pile supported desks; concrete and granite seawalls; precast concrete box caissons; mooring dolphins; and shore protection and breakwaters with natural stone and manufactured armor in areas of high seismic activity, extreme wind and wave environments and poor foundation conditions.

His overall duties consist of development and administration of subsurface exploration programs; coordination and administration of site exploration programs; field testing; analysis and design of foundations and structures; waterfront facilities; retaining and earth structures; economic analysis; planning and feasibility studies; preparation of project specifications; cost estimates; and construction coordination and management.

Representative projects follow.

* Norwich Municipal Marina, Norwich, CT: Comprehensive services from initial feasibility studies through design and construction management services for this 250-slip marina and condominium complex.

* Fishing Pier Design, Eastport, ME: Designs for a 500-foot long fishing pier to serve as a berthing area for Eastport fishing vessels, as well as protection for the inner harbor. The pier is constructed of steel sheetpile cells with a timber access trestle.

* Portsmouth Wharf Extensions, Portsmouth, NH: Condition surveys of piers and wharves to plan and design cargo piers and wharf extensions.

* Oak Bluffs, Oak Bluffs, MA: Condition survey and study investigating existing bulkheads, wharves and jettings. Also included development of recommendations and designs for repairs and improvements.

* Port Expansion, Davisville, RI: Site Selection layout and design of 2,400 l.f. bulkhead, land filling, dredging, water and sewers.

MARK E. SHAMON
PROJECT ENGINEER

PROJECT ASSIGNMENT:	MARINE ENGINEER
EXPERIENCE:	6 Years
EDUCATION:	M.S. - Civil Engineering
	B.S. - Civil Engineering

Mr. Shamon is a member of the Civil, Geotechnical and Marine specialty design division. He has assumed the responsibilities of a lead project engineer on a number of coastal engineering projects. Additionally, he maintains an active design role as a geotechnical engineer responsible for developing subsurface exploration programs and soils analyses, and for implementation of findings into final plans, specifications and estimates on projects managed by the Transportation, Environmental, Architectural and Construction divisions. Mr. Shamon's experience also includes research in the area of pavement design and rehabilitation.

The following is a representative listing of Mr. Shamon's civil/marine design experience.

* $1.2 Million Vitale Memorial Park/Lobsterman's Landing, Saugus, MA: Public/commercial riverside development project which included design of timber pier and floats, boat fueling facility, harbormaster quarters and cold storage facilities for lobstering operations.

* Hingham Harbor, MA: Design of reconstructed public pier and new boat launching ramp. Project cost was $200,000.

* $25 Million Transportation Facilities Plan for Marine Terminals at Deer and Nut Islands, Boston, Harbor, MA: Research and criteria development for bulk and roll-on/roll-off pier facility. Upon completion of the facilities report Mr. Shamon became the project engineer for marine and geotechnical design of these facilities.

* $1 Million Rehabilitation of Pier 10, South Boston, MA: Concrete restoration of deteriorated pier, expansion of berthing and mooring facilities.

ROBERT A. BROWN, P.E.
SENIOR GEOTECHNICAL ENGINEER

PROJECT ASSIGNMENT:	GEOTECHNICAL ENGINEER
EXPERIENCE:	20 Years
EDUCATION:	M.S. - Structural Engineering
	B.S. - Structural Engineering

Mr. Brown directs the operation of geotechnical personnel in the Soils Group. He, and the members of this group, plan, specify, inspect, supervise and analyze field subsurface exploration programs; plans, specify and analyze laboratory testing programs; and perform all geotechnical analysis and design required for multi-disciplined projects. These projects involve analysis and design of foundation systems for marine waterfront facilities; multi-story buildings; transportation facilities including bridges, highway embankments and environmental projects involving deep pump station structures and treatment facilities, and pipelines.

Other experience includes the Reading DPW Facility and direction of the geotechnical program for the Capital Center project in Providence, Rhode Island. The program encompassed geotechnical investigations, testing and preparation of reports and final design. Other transportation projects include development and execution of the geotechnical work for the I-93 Route 16 Interchange in Medford, Massachusetts and a portion of the Route 25 project in Bourne and Plymouth, Massachusetts.

Recent marine/waterfront experience includes the following.

* Berth 3 Rehabilitation, Port of Providence, RI: Provided analysis and design, and served as Project Manager for the underpinning of about 600 linear feet of granite quay wall. The project involved installation of about 1,200 small diameter cast-in-place concrete piles.

* Boston Edison Pipe Cable Crossing, Charles River Basin, Boston, MA: Investigation, analysis and geotechnical design of pipe cable crossing of the Charles River. Design involved placement of pipe cable on a fabric supported mat. The design avoided excavation of hazardous sediments existing on the river bottom.

PAUL B. ALDINGER, P.E.
PRINCIPAL GEOTECHNICAL ENGINEER

PROJECT ASSIGNMENT:	GEOTECHNICAL ENGINEER
EXPERIENCE:	19 Years
EDUCATION:	P.h.D. - Geotechnical Engineering M.S. - Geotechnical Engineering B.S. - Civil Engineering

Dr. Aldinger has been involved in a wide range of civil engineering projects in areas such as waterfront development, building construction, solid waste handling, disposal and/or recovery systems; power generation facilities; pollution control facilities; highway and bridge construction; and groundwater studies. Dr. Aldinger's involvement has been concentrated in the geotechnical analysis and design of these projects. As Principal Geotechnical Engineer and Principal Groundwater Hydrologist, he directs the geotechnical and geohydrologic design aspects of all projects.

Dr. Aldinger's experience in waterfront development includes the geotechnical analysis and design for the following selected list of projects.

* $6.5 Million Port Expansion, Municipal Wharf, Providence, RI: A related project involved modification of an existing gravity wall to allow deepening of the adjacent berth using small diameter piping drilled through the seawall.

* $3 Million Extension of the New Hampshire Port Authority Terminal, Portsmouth, NH.

* Naval Shipyard, Newport, RI: Lateral transfer and bulkhead system.

* Waterfront Improvements, Port of Fall River, MA: Recommendation of system alternatives.

* $1 Million Roll-On/Roll-Off Facility, Portsmouth, NH: Included a feasibility study.

DAVID R. WESTCOTT, AICP
PRINCIPAL PLANNER

PROJECT ASSIGNMENT:	PERMITS/PLANNER
EXPERIENCE:	9 Years
EDUCATION:	M.S. - Community Planning
	B.S. - Resource Development

Mr. Westcott has recently served on Maguire's project team for the MWRA Water Transportation Facilities Assessment and was principal author of the On-Shore DEIR (site selection document). Mr. Westcott also participated in the EIS for the siting of wastewater treatment facilities in Boston Harbor for EPA.

Mr. Westcott was the Project Planner and Interdisciplinary Coordinator for the preparation of Environmental Impact Statements (EIS') for the United Stated Environmental Protection Agency, Region 1, in Plymouth, Massachusetts and Oak Bluffs, Massachusetts. He is also supervising the preparation of EIS's for wastewater facilities in Kingston, Massachusetts, and the upgrading of the Boston Metropolitan Area Sewerage System.

Various aspects of these projects include: Cost effectiveness analysis of alternatives, affordability studies, and evaluation of economic effects on federal actions on taxpayers, property owners and local government; evaluation of direct and indirect impacts on alternative action on air quality, surface and groundwater quality, wetlands, floodplains, sole source aquifiers, prime agricultural lands and threatened or endangered species; and the evaluation of effects on traffic, land use patterns, and cultural and historic resources.

Mr. Westcott is also completing an Environmental Information Document (EID) assessing effects and cost effectiveness of alternatives for abatement of combined sewage discharges to the Woonsocket River in Providence, Rhode Island, and has previously completed an EIS for wastewater treatment, transmission, and collection facilities in Falmouth, Massachusetts.

His work included responsibility for public participation, coordination of federal, state and local government interests and resolution of conflicts between laws, plans, and policies of federal, state, and local governments and conflicts between these laws, plans of policies and public perceptions.

Mr. Westcott's previous experience included an impact assessment of commercial development in Newport, Rhode Island, and preparation of economic development recommendations resulting from the activities of the Long Range Planning Committee of a Partnership of Business, Labor, and the Government sponsored by the Governor of the State of Rhode Island. The Partnership project consisted of compiling an inventory of the State's resources and an assessment of limitations to economic improvement leading to policy recommendations to spur expansion and stabilization of the State's economy.

FRED J. RAVENS, P.E.
PRINCIPAL ENGINEER

PROJECT ASSIGNMENT:	ELECTRICAL ENGINEER
EXPERIENCE:	33 Years
EDUCATION:	M.S. - Engineering Management
	B.S. - Electrical Engineering

Mr. Ravens is a highly experienced electrical engineer with a substantial supervisory background covering a range of project types from waterfront facilities and commercial/industrial buildings to resource recovery facility design engineering. Employed by the Corps of Engineers for 35 years prior to joining Maguire, his last assignment was Chief, Design Branch and Assistant Chief, Engineering Division. He supervised approximately 70 engineers and technicians, including architects, specification writers, civil engineers, electrical engineers, estimators, mechanical engineers and surveyors in the preparation of plans and specifications for new construction, renovation, maintenance repair of administrative buildings, dining facilities, roads and utilities.

Recent relevant experience includes:

* Electronic Research Center, Cambridge, MA:
* Natick Laboratory Headquarters Building, Natick, MA:
* Cambridge Research Laboratory Geophysics Laboratory, Bedford, MA:
* Cambridge Research Laboratory Electronics Laboratory, Bedford, MA:
* Hanscom Filed Computation Laboratory, Bedford, MA:
* Mail Carrier Annex Renovations and Additions, U.S. Postal Service, Providence, RI:
* Hanscom Field Headquarters Building, Bedford, MA:
* Charles River Pumping Station, Boston, MA:
* Fox Point Pumping Station, Providence, RI:
* Surface Warfare Officers School Applied Instruction Facility, Newport, RI:
* Rhode Island School of Design, Providence, RI:
* Gymnasium, Limestone, ME:

ALBERT J. BOLDRIGHINI
ASSISTANT VICE PRESIDENT

PROJECT ASSIGNMENT:	CONSTRUCTION INSPECTION
EXPERIENCE:	25 Years
EDUCATION:	Structural Design

Mr. Boldrighini has overall management responsibilities of the Construction Management Group activities at the Waltham office of Maguire Group Inc. In this capacity, he is responsible for contract administration, project management during construction, cost estimating, and review of shop drawings for projects in both the public and the private sectors.

Mr. Boldrighini is also responsible for inspection on all EPA funded projects designed in the Waltham office.

Some of the projects in which Mr. Boldrighini has acted as the Construction Manager and/or Project Manager include sewerage improvements in the cities of Cambridge, Boston, Fall River, Salem, and Waltham as well as projects for the Boston Redevelopment Authority. Most of these project costs, totalling approximately eighty million dollars, were EPA funded. These consisted of sewage treatment plants, water tanks, pumping stations and many diversified water and sewer pipelines projects. Some of these projects involved the installation of large diameter pipes in congested metropolitan areas.

Prior to joining Maguire Group Inc., Mr. Boldrighini's previous experience (25 years) included responsible positions as Estimator, Construction Engineer, Superintendent and General Superintendent on major construction projects in New England for firms such as Pirini Corporation, Barletta Company, DeMatteio Construction Company, and Coleman Brothers. He was general superintendent of the Callan Construction Company of Bristol, Rhode Island for ten years.

Some of his major projects include Hard Rock Tunnels in Boston, Massachusetts and in Liberty, New York; Interstate Highways in New England such as the Central Artery in Boston; and the Horseneck Beach Bridge in Westport, Massachusetts; and sections of Route 128 and 25.

His experience during the ten years with Callan Construction Company was highly diversified as related to municipal construction in the areas of drainage, sewerage systems, utilities, and street construction.

ANTHONY B. CAVALIERI
PRINCIPAL ELECTRICAL ENGINEER

PROJECT ASSIGNMENT:	ELECTRICAL ENGINEER
EXPERIENCE:	32 Years
EDUCATION:	Electrical Certificate

Mr. Cavalieri is responsible for the engineering and design of complete electrical systems for building services; industrial power and control; power generation and distribution; environmental electrical services; transportation electrical services; highway lighting; airport lighting; and power and special auxiliary systems which include fire alarm, communications, security and data distribution. His services also include electrical specifications, estimates, field supervision of electrical construction and client contact. Mr. Cavalieri has extensive experience in all phases of electrical construction.

* Economic Development and Industrial Corporation (EDIC of Boston, City of Boston, MA: Design of new high voltage distribution system for this large former U.S. Navy shipyard annex included both overhead and underground distribution and the replacement of transformers. This project was unique in that a salvage feature was introduced requiring the contractor to salvage all the unused copper conductor in the vast underground distribution system, and pay the City of Boston the salvage value of the cable. The result was more than $1,000,000 paid to the City, funding a major portion of the project.

* Mystic River Dam and Pumping Station, Somerville, MA: Design of electrical systems for power, lighting, boat traffic signalling, control stations for operation of dam navigation gates, lighting protection and miscellaneous auxiliary systems.

* Charles River Dam and Pumping Station, Boston, MA: Electrical design of all systems including control stations for navigation gates, lighting, signalling, power distribution, motor control centers, and miscellaneous auxiliary systems. This project was awarded the Presidential Award for Design Excellence.

* Market Street Development, Burlington, VT: Electrical design of lighting of this main thoroughfare which was converted to a shopping mall. This [project also included design of new electrical services for all store buildings in the mall area.

* Interstate 93, Somerville and Medford, MA: Lighting design for high mast lighting poles for interchanges and straightaways in connection with this interstate project.

* Interstate I-90, Worcester, MA: Design of high mast lighting for interchanges and straightaways and 40 foot lighting standards for service and frontage roads.

ARTHUR E. LANDERS
PROJECT MANAGER, URBAN RENEWAL

PROJECT ASSIGNMENT:	UTILITIES MANAGER
EXPERIENCE:	33 Years
EDUCATION:	B.A. - B-60 Engineering

As assistant project manager and project manager for the Boston Redevelopment Authority's South End Urban Renewal Project since 1966, Mr. Landers has provided administration and coordination of engineering with urban planning. Mr. Landers is Maguire's resident expert of Boston's infrastructure.

The South End Urban Renewal Project includes restoration of the water supply system, verification of condition of existing sewers and drains scheduled to remain, reconstruction of storm drainage and sanitary sewer systems, installation of new street lighting systems, construction of parks and playgrounds, structural repair of building shells, and reconstruction of many miles of city streets. Starting in 1977, the sewer and drain systems reconstruction has been performed through the EPA grants program.

Mr. Landers' work includes the staging and scheduling of contracts; the correlation of engineering design with public and private utilities, and private development; the preparation of proposals related to state and federal funding programs; and operating procedures which facilitate cooperation between the Boston Redevelopment Authority and the City of Boston, Federal and State Agencies, private utility companies, and the South End community.

Mr. Landers is responsible for layout and design, and the preparation of construction plans and other contract documents for numerous projects. He is familiar with past and current practices of both public and private utility agencies, and with problems related to construction of both public and private utility agencies, and with problems related to construction in the urban setting. He has supervised resident engineering for the South End Urban Renewal Project contracts since May 1972. Land taking and property transfer plans, the accompanying legal descriptions, and Massachusetts Land Court Plans are prepared under his supervision. Mr. Landers has also been responsible for the critical review of private site development plans, as well as private utility installations.

Employed by Maguire Group since 1950, Mr. Landers has worked on many varied projects in the fields of transportation, sanitary engineering, and urban renewal.

JOHN GAYTHWAITE, P.E.

PROJECT ASSIGNMENT: CONSULTANT - OCEANOGRAPHY
EXPERIENCE: 17 Years
EDUCATION: B.S. - Civil Engineering

John Gaythwaite, P.E. is an experienced registered professional engineer serving as a consultant to industry, commerce, and the public and private sectors. He has served as a project manager on many challenging projects including the design of shipyard, dry docking, marine terminal facilities, waterfront inspection and rehabilitation, and structural design and investigations. A frequent guest lecturer, and author of various technical publications including the textbook The Marine Environment and Structural Design, he is also an active member of the American and Boston Society of Civil Engineers, The Society of Naval Architects and Marine Engineers, and the Marine Technology Society.

John Gaythewaite is dedicated to helping his clients solve problems in the most cost-effective and timely manner utilizing contemporary materials and techniques. With many associations throughout the industry and in academia he can bring to bear the kind of expertise at the required level of sophistication to fulfill your marine and structural engineering needs.

Areas of Expertise Include:

* Port and Harbor Engineering: Planning and design of marine facilities for the berthing, mooring, and repair of vessels including terminals, dry docks, shipyards, marinas and small craft harbors, etc.

* Ocean & Coastal Engineering: Evaluation of wind, wave, current, ice and storm surge effects, hydrodynamic forces, mooring loads, and determination of design criteria. Planning and design of shore protection structures such as breakwaters, jetties, and seawalls.

* Structural Engineering: Structural analysis and design especially where unusual service conditions and environmental loadings of primary importance, including:

  Conventional Structures: Commercial and industrial buildings and bridges. Special Purpose Structures: Platforms, craneways, underground tanks, industrial and heavy structures, etc. Floating Structures: Floating breakwaters, dry docks, plant and equipment, booms and float systems, etc. Waterfront Structures: Piers, wharves, bulkheads, dolphin, trestles, moorings, underwater foundations, waterfront restoration.

CHAN LIN, P.E.

PROJECT ASSIGNMENT: STRUCTURAL CONSULTANT
EDUCATION: M.S. - Structural Engineering
B.S. - Civil Engineering

Mr. Lin has technical and administrative experience in a wide range of structural engineering assignments. He has worked on several projects for Massport including the Marine Terminal Phase II project as a subconsultant to Maguire. He worked on repairs to Building 10 at the Boston Army Base; structural design of new parking garages at the Crystal Manor in Brookline, Massachusetts and Laconia, New Hampshire. He also worked on renovation of the Faulkner Hospital parking garage. He is familiar with structural investigation and rehabilitation projects including housing, warehouse, waterfront structures, retaining walls, and bridges. He was also responsible for the structural design of the System Management Engineering Facility at Hanscom AFB in Bedford, Massachusetts, and many other projects which appear in the experience section of this proposal.

He recently worked on the Boston Harbor On-Shore Transportation Facilities Plan with Maguire for the MWRA.

J. WALTER BRAIN, ASLA
PRINCIPAL

PROJECT ASSIGNMENT:	LANSCAPE ARCHITECT
EXPERIENCE:	15 Years
EDUCATION:	M.A. - Landscape Architecture
	B.A. - Landscape Architecture

Mr. Brain has extensive experience in all aspects of landscape architecture, including site selection, site planning, site engineering, design for planting, open space, parks and environmental impact analysis, including wildlife, vegetation and water. He has 15 years of experience in landscaping a wide variety of building projects in the northeast. Mr. Brain worked on the Logan Airport roadways reconstruction project as sub-consultant to Maguire.

MAGUIRE
GROUP

RELATED EXPERIENCE

Maguire has extensive experience with projects involving marinas/ waterfront facilities and their associated utilities and structures, historic landmarks, the permitting process and resident inspection. Following are representative project descriptions.

Saugus Lobstermen Landing
Saugus, Massachusetts

The Town of Saugus selected Maguire Group Inc. to design improvements to a one acre marina area. The $800,000 project will be completed in two phases, the first being the main commercial area and the second being the recreational area. New floats for 24 boat parking spaces and a promenade deck are included in the scope. Subject to final approval by the client are a new harbormaster's building, bait storage building, fueling facilities and landscaping. It is anticipated that the improvements will bring significantly increased revenues to the town because of the proposed fueling facilities and mooring fees.

Chubbs Wharf
Mystic Seaport, Connecticut

The Charles W. Morgan, last survivor of the great fleet of American whalers, lies at her permanent berth at Chubbs Wharf, Mystic Seaport, Mystic, Connecticut. Built in 1841 in New Bedford, Massachusetts, the Morgan went to sea for eighty years in pursuit of whales and earned more for her owners than any other whaler on record. In 1967, she was designated a Registered National Historical Landmark.

Chubb's Wharf is a granite-filled structure 100 feet wide, extending 150 feet into the Mystic River. Its dimensions permit laying the Morgan alongside any of its three faces, achieving exhibit variety as well as changing directional exposure which is so desirable for wooden vessels. In appearance and construction, it is a reproduction of waterfront piers utilized in old whaling ports such as New Bedford, Massachusetts and contributes both aesthetically and historically to the Mystic Seaport Museum.

Beverly Harborfront Public Improvements
Beverly, Massachusetts

Maguire Group Inc. prepared a study for the City of Beverly addressing the entire inner harbor in Beverly and proposed improvements. The study recommended improvements to public access, construction of a public pier and marina,

improvements to historic areas, and zoning amendments. The study was an important element in Beverly's successful application to CZM for $1 million from the C.F.I.P. program. Design is now proceeding.

Waterside Marina and Wave Screen
Norfolk, Virginia

The $2 million Norfolk Waterfront Redevelopment project is a model of downtown redevelopment. Targeted at reorientation towards Norfolk's maritime heritage, this project, which spans a decade of construction effort, has reshaped the city's waterfront into an integrated series of parks, and commercial and office enterprises. The lineal development is anchored to the east by the Omni Hotel and the Waterside shopping complex. Located on the inland waterway, the Waterside complex afforded an excellent opportunity for a marina complex for transient boats and visiting tall ships to set the theme for the public oriented water access.

When the Norfolk Redevelopment and Housing Authority conceived the project, innovation and aesthetics were the key to the development which consists of a wave screen and timber walkways constructed parallel to the shore, thus creating a small boat harbor. The wave screen was constructed in difficult foundation conditions utilizing large diameter concrete piles capped with a concrete beam. It is covered by a timber walkway 750 feet long which is open to the public. Within the harbor is a full service marina for transient boats including floating docks, electric and water service, sewage pumpout facilities and a dockmaster's office. The low level structure and orientation of the docks was designed to minimize visual obstructions to the water.

Outboard of the wave screen is a berth 500 feet long for visiting tall ships or naval vessels. Four large concrete breasting dolphins provide mooring for the ships. The berth is supplied with complete utility services.

Nantucket Ferry Terminal
Nantucket, Massachusetts

The Woods Hole, Martha's Vineyard and Nantucket Steamship Authority retained Maguire to provide final design and contract documents for the reconstruction of its Nantucket Ferry Terminal. The project, funded in large part by the U.S. Urban Mass Transportation Administration, includes design of a new ferry slip including dolphins, transfer bridge and boarding platforms; reconstruction of the existing ferry slip; approximately 800 lineal feet of new bulkhead; dredging and filling; and provision of new terminal buildings, traffic flow and other site development features. Phasing of construction was a critical element of Maguire's design. The SSA needed to provide uninterrupted service throughout the construction period.

Pier 10 Rehabilitation
Boston, Massachusetts

Pier 10 in the former Naval Annex in South Boston is being rehabilitated under the CFIP funding program. One-half of the pier, which was originally built in 1942, was demolished to make room for floats to serve lobster boats and Boston Police boats. The other half is being restored to its original capacity by jacketing piles and other repairs to the deteriorated concrete. The restored pier will serve for unloading of lobster boats, and assist in dry-dock operations, while parts of it will become an extension of a small park.

Marine Terminal Development
Boston, Massachusetts

This project involved the filling of thirty-five acres of Boston Harbor, and fifteen acres of adjacent land at the former South Boston Naval Annex.
The project has the potential for simultaneous berthing of several of the largest containerships now sailing in the Atlantic trade routes.

The project included the design of both earth and rock perimeter dikes of approximately 2,400 feet in length to provide containment of fill, the rehabilitation of an existing wharf structure for interim berthing, and necessary drainage and other utilities and facilities for site development. This project will permit the Port of Boston to achieve its full potential in the handling of both general and containership cargo well into the 21st century.

Pier Facilities at Deer and Nut Island
Boston Harbor

As part of the cleanup program of Boston Harbor, construction materials and workers for the construction of the new treatment plant will be shipped from and to Deer and Nut Islands by boat. Maguire Group designed the pier facilities to receive these shipments both islands. The Deer Island facilities consist of 2 roll-on/roll-off slips and piers, personnel pier and extensive barge unloading areas created by sheet pile bulkheading and dredging. The Nut Island pier can accommodate one roll-on/roll-off vessel, personnel transfer and one small barge.

The piers on both sites are pile supported structures, and roll-on/roll-off transfer at all tide levels is achieved via 110 ft. long transfer bridges supported on floating pontoons.

Hingham Town Pier and Launching Ramp
Hingham, Massachusetts

The Town of Hingham selected Maguire to prepare funding applications and design for a new Town Pier and a boat launching ramp in Hingham Harbor. Both projects were to replace deteriorated existing facilities. The launching and pier construction is now complete.

Oak Bluff Harbot
Oaks Bluff, Massachusetts

Oak Bluff Harbor was the subject of a condition survey, a study and design completed by Maguire. The project consisted of investigations of bulkheads, wharves and jetties and development of recommendations for necessary repairs and improvements. The Town of Oak Bluff successfully obtained Federal funding for repairs and improvements. The project was designed by Maguire and included construction supervision.

Newport News Seafood Industrial Park
Newport News, VA

Maguire provided the City of Newport News with final drawings, specifications, construction schedules and cost estimating for a series of public improvements to the Seafood Industrial Park in Newport News. These public improvements include: construction of 5,000 feet of new bulkheading in the harbor to allow a harbor depth of 16 feet below mean low water; construction of a breakwater and jetties; construction of a public docking area within the harbor.

Selection of the bulkhead types was critical due to the minimum space available in certain areas of the harbor, and the need to minimize disruption of existing businesses. The two types of bulkheads best suited were the large diameter concrete cylinder pile and concrete sheet pilings with earth anchor tiebacks.

The purpose of the breakwater is to protect the mouth of the harbor from siltation following the construction of a new tunnel entrance island by the Virginia Department of Highways and Transportation, and to provide a sheltered mooring area. Within the protected area will be piers for berthing, maintenance and repair of over 50 fishing trawlers.

HARBOR & RECREATIONAL FACILITIES

THE MAGUIRE GROUP

PROJECT	LOCATION	CLIENT	DESCRIPTION OF CONSULTANT'S ROLE	RESULTS
Saugus Lobsterman Landing	Saugus, Massachusetts	Town of Saugus	Design of improvements to a one-acre marina in two phases, commercial and recreational.	Awaiting approval by client of final scope: design of harbor-master's building, bait storage building, fueling facilities and landscaping.
Nantucket Ferry Terminal	Nantucket, Massachusetts	Nantucket Steamship Authority	State of the art design in berthing dolphins and fendering access ramps.	Completed.
Roberts Hawaii Pier No. 5	Honolulu, Hawaii	Roberts Hawaii	Conceptual plans and cost estimates for an extension wharf to accommodate passengers and supplies for a 110-foot sightseeing craft.	Project not implemented.
Harbor Improvements Oak Bluffs	Martha's Vineyard, Massachusetts	Town of Oak Bluffs	Maguire has been a continuing consultant to the town from study phase, grant acquisition, design and construction. Harbor improvements included improvements to 1,100-feet of deteriorated timber bulkhead and associated utilities.	Phase I completed. Phase II under construction.
Black Swan Marina	Old Saybrook, Connecticut		Detailed foundation analysis provided for marina requiring foundation spanning subsurface transition zones between glacial till and adjacent soft marshlands.	Completed.
Chubbs Wharf Mystic Seaport	Mystic, Connecticut	Mystic Seaport	Permanent berth for Charles W. Morgan, last survivor of America's whaling fleet. In appearance and construction, it's a reproduction of waterfront piers utilized in old whaling ports.	Vessel is boarded and toured by thousands of Seaport visitors every year.
Newport Shipyard Marina	Newport, Rhode Island		Conversion of a former U.S. Navy marine facility to a private shipyard and marina.	Completed.
Lake Tashmoo Harbor Study	Vineyard Haven, Massachusetts	U.S. Army Corps of Engineers	Study for recreational boating and marina purposes. Situation prohibited recreational boating use.	Not implemented.
Marine Dynamics II Marina and Shipyard	Somerset, Massachusetts	Marine Dynamics II	Engineering feasibility and marketing study for development of a marina and marine repair facility.	Not implemented.

HARBOR & RECREATIONAL FACILITIES

THE MAGUIRE GROUP

PROJECT	LOCATION	CLIENT	DESCRIPTION OF CONSULTANT'S ROLE	RESULTS
Christopher Park Marina	Newport News, Virginia	City of Newport News	Maguire provided the city with a series of comprehensive waterfront development plans. The plans included preliminary engineering of the major waterfront elements: a full service marina, commercial, retail and restaurant facilities; extensive slope protection and transistion from the waterfront complex to the existing Christopher Park.	City is presently working on a financial package for this development.
Bourne Marina	Buzzards Bay, Bourne, Massachusetts	Massachusetts Department of Quality Engineering	Consultant to DEQE for the design of 180 slip marina and service building. Full service marina, boat launch ramp, fuel sewage pumpout facility, plus service building complete with rest rooms.	Marina complete and is fully operational.
Waterside Marina	Norfolk, Virginia	Norfolk Housing and Redevelopment Agency	Provided design and inspection services for a full service marina along the intercoastal waterway of Norfolk's "Waterside" Complex. The floating dock marina includes concrete cylinder pile wave screen, electricity, water, lighting, sewer pumpout facility, berths for 35 recreational vessels and a 460-foot berth for visiting small naval craft, Coast Guard or tall ship types.	Project completed and fully functional.
Leeward Marina	James River, Newport News, Virginia	City of Newport News	Design of a 200-slip full service marina. Includes floating docks utilities, service building, dredging and wave screen. Major efforts in the dredging and upland disposal of 55,000 cubic yards of material.	Project is under construction.
Norwich Marina	Norwich, Connecticut	City of Norwich	Consultant to engineer of record through concept, funding application, design construction for this vanguard project of downtown revitalization.	Project has served as a catalyst for major revitalization of the core downtown area.
Roaring Falls Marina	East Providence, Rhode Island	Byrd, Inc.	Studies for reuse of this former industrial site. Projections of recreational boating demands, type mix, size boats. Preliminary design of marina.	Site has been subdivided into commercial sites which are for sale. Marina user is being sought.

HARBOR & RECREATIONAL FACILITIES

THE MAGUIRE GROUP

PROJECT	LOCATION	CLIENT	DESCRIPTION OF CONSULTANT'S ROLE	RESULTS
Patriot's Point Naval Museum Marina	Charleston, South Carolina	Patriot's Point Development Authority	Part of a large project to develop a 500-acre parcel on the Cooper River. Maguire designed mooring dolphins and berth for USS Yorktown aircraft carrier.	Project completed. Thousands touring historic aircraft carrier.
Dana Point Harbor	San Clemente, California	Orange County Harbor District	Small craft harbor designed by Maguire to provide berthing for 2,150 boats and associated facilities for launching 1,000 trailered boats per day.	Completed.
King Harbor	Redondo Beach, California	City of Redondo Beach	Maguire designed a 1,200-boat marina, fishing pier, two acre warm water lagoon park and harbor-related landside commercial and recreational facilities.	Completed.
Monterey Harbor	Monterey, California		Feasibility study, conceptual and final designs for complete interior configuration of recreational and fishing boat harbor. Included quay walls, docking areas, roads, utilities and fill areas.	Completed.
Cayo Mata Marina	Salinas, Puerto Rico	Commonwealth of Puerto Rico Environmental Quality Board	Master site plan, EIS, and designs for marina and condominium complex; effects of sediment transport and erosion, currents and subsurface makeup were analyzed.	Not implemented.
Middletown Waterfront Improvement Project	Middletown, Connecticut	City of Middletown	Master plan and all designs for redevelopment of ½ mile of Connecticut River waterfront. Improvements included a 1,500-foot steel bulkhead, plus 200 feet of self-adjusting floating docks. Renovated building has become popular restaurant, Harborpark.	Harborpark has become a popular spot for people to visit by car and boat. City has retained Maguire to master plan additional riverfront property abutting this to the south. (Not a Maguire design.)
Bald Head Island Marina	Southport, North Carolina	Bald Head Island Corp.	Exteme littoral activity was causing marina basin to silt very rapidly. Oceanographic study identified processes and recommendations to mitigate.	Marina hasbeen constructed. Maguire prepared a generic design which was site adapted by owner and contractor.

MAGUIRE
GROUP

REFERENCES

Maguire is proud of its performance on previous projects and our reputation. The following references can attest to our capabilities and we invite BRA to contact these clients.

* Nantucket Ferry Terminal, Nantucket, MA

  Woods Holes, Martha's Vineyard and Nantucket Steamship Authority
  Nantucket Ferry Terminal
  Ronald Eastman
  P.O. Box 276
  Nantucket, MA
  (617) 228-5327

* Oak Bluff Harbor, Oak Bluff, MA

  Mr. Brad Smith
  Chairman, Harbor Advisory Commission
  Town Hall
  Oak Bluff, MA
  (617) 693-1086

* Marine Terminal Development, Boston, MA

  Mr. George Johnson
  MASSPORT
  10 Park Plaza
  Boston, MA 02116-3973
  (617) 973-5500

* Beverly Harborfront Public Improvements, Beverly, MA

  Mr. John Monahan
  City of Beverly, MA
  (617) 922-3311

* Lobsterman's Landing, Saugus, MA

  Mr. John Mahoney, Town Planner
  Town of Saugus
  (617) 233-8811

* Hingham Town Pier and Launching Ramp, Hingham, MA

Mr. Brian Sullivan
Director Department of Highways
Town of Hingham
(617) 749-1300

* Pier Facilities at Deer and Nut Islands, MWRA, Boston, MA

Mr. Kevin O'Brien
Massachusetts Water Resources Authority
100 First Avenue
Charlestown Navy Yard
(617) 242-0230

* Pier 10 Rehabilitation, Boston Harbor

Mr. Larry Mammoli
EDIC
10 Drydock Avenue
South Boston, MA
(617) 725-3300

MAGUIRE
GROUP

Presidential Award For Design Excellence
Charles River Project, Boston, Massachusetts

The President of the United States
presents this
Award for Design Excellence
to
C.E. Maguire, Inc.
For Outstanding Achievement in Design for the
Government of the United States of America

The White House
January 30, 1985

Ronald Reagan

Port and Marine Facilities

Port and Marine Facilities

The Maguire Group has been providing planning and design of port and marine facilities to the maritime industry worldwide for more than forty years. Tempered by years of experience, the Maguire Group offers a practical approach to the planning and design of port and marine projects. Our approach recognizes the ultimate goal of economic and environmental viability and financial success as well as the positive economic impact inland and coastal waterfront development can have on a community, state or nation.

The Maguire Group's port planning and design team offers to you all the professional services necessary to ensure an efficient and cost effective means to achieving your port and marine facility objectives.

Port Planning

- Port Economics
- Operations and Management Planning
- Market Analysis
- Transportation and Traffic Planning
- Efficiency Studies
- Scheduling

***Photos:**

1. Waterfront Improvements, Newport News Seafood Industrial Park, Newport News, VA
2. Geotechnical Subsurface Investigation Platforms, Guam Ammo Port Project, Guam, Mariana Islands
3. Wave Modeling, Guam Ammo Port Project, Guam, Mariana Islands
4. Bulkhead Rehabilitation, Rhode Island Port Authority, Quonset Point, RI

* All photographs are numbered from top to bottom and left to right

```
    PROJECT                                  CEM JOB NO
    DATE OF RUN          1983                DESIGNED BY                    JKM
    NOTE   ANCHORED BULKHEAD

DEPTH TO DREDGE LINE          28 3   DEPTH TO ANCHOR ROD            7 0
DEPTH TO HIGHEST W L            0    MAXIMUM TIDAL VARIATION        8 3
DEPTH OF MAT  NO  1           2.5    DEPTH OF MAT  NO  2            9.8
DEPTH OF MAT  NO  5 .        10 0    UNIFORM SURCHARGE            150 0
UNIFORM LINE LOAD               0    DIST  FROM BULKHEAD            0
** RAN-COU THEORY **                 UNIT WT  OF WATER             64 0

YOUNG'S MOD. - PILE       30 0XE6   ALLOW  STRESS   PILE      32 0XE3
ALLOW  STRESS - ROD       30 0XE3   ALLOW  STRESS - WALE      32 0XE3

** UNITS - FT , DEGREES, LBS/FT, LBS/SQ-FT  LBS/CU-FT  LBS/SQ-IN

      MATERIAL   - -    1        2        3        4        5

PHI ANGLE  ..  .....   36.0     29 0     29 0     29 0     29 0
COHESIVE STR  . . ..      0        0        .0       0        0
MOIST WT. ....  ...  130.0    115.0     ----     ----     - --
SUBMERGED WT. ......   66 0     66 0     66.0     66 0     66 0
WALL FRIC. ANG.....       0     17 0     17.0     17 0     17.0
PASSIVE RED. FAC. ..    ----     ----     ----     .800     800

ACTIVE -K- FACTORS (1 THRU 4)
       260          347          347          347

ACTIVE PRESSURES (1 THRU 5 - 6 THRU 9)
      38.942       38.942       81.779      109.297      333.720
     333 720      929 129      929 127      988 095

ACTIVE FORCES (1 THRU 5 - 6 THRU 10)
        .000         .000       97.356       53 546     1071 109
    1099.692     8676.711     7740.299     2392 503       75.922

ACTIVE FORCE MOMENT ARMS ABOUT ANCHOR ROD (1 THRU 5 - 6 THRU 10)
     -7.000       -7.000       -5.750       -5.333          40#
      2.033       18 300       22.633       32.588       33 017

TOTAL ACTIVE FORCE AND MOMENT
   21207.121   416264 000

PASSIVE -K- FACTORS (1 AND 2)
       4.078        4 078

PASSIVE PRESSURES (1 THRU 4)
         000     2691 749     2691.749     3384.675

PASSIVE FORCES (1 THRU 4)
        .000    13458 746     6931 256      892 399

PASSIVE FORCE MOMENT ARMS ABOUT ANCHOR ROD (1 THRU 4)
       26 300       27 967       32.588       33 017

TOTAL PASSIVE FORCE AND MOMENT
   21282.402   631732 625

NET WATER PRESSURE AND WATER FORCES (1 THRU 3)
       531.200     2204 479    10624 000     3339 920

WATER FORCE MOMENT ARMS ABOUT ANCHOR ROD (1 THRU 3)
TOTAL WATER FORCE AND MOMENT
        -1 467       11.300       25 492    16168 400   201958.094

DEPTH OF EMBEDMENT REQUIRED FOR STABILITY..        12.33  FT.
PILE LENGTH - INCLUDES 1 4 x EMBD. DEPTH ..        45 56  FT.
ANCHOR PULL..  .  .  .. ..  .  .....           16093 13  LB/FT
MAXIMUM MOMENT. ....  .....  .......        1236582.00  IN-LB/FT
MAXIMUM MOMENT AT.  . . ..... .........           15 10  FT  BELOW
                                                         ANCHOR ROD
***
MOMENT AT ANCHOR ROD ..  ..... . . .       -71501.66
***
SECTION MODULUS OF PILE REQUIRED  .  .  .  .       38 64  CU IN
USE PILE SECTION (FREE EARTH SUPPORT).....         MZ 38
      OF SECTION MODULUS..  . ..... .  .           46 80  CU IN
MOMENT REDUCTION RATIO  (1  TRIAL).  .....           98
REDUCED DESIGN MOMENT..... ..... ....      1215128.50  IN-LB/FT
SECTION MODULUS OF PILE REQUIRED..... ....       47.97  CU IN
REDUCED PILE SECTION  ..... ...  .  .....         MZ 32
      OF SECTION MODULUS..  ..... . .  .           38 30  CU.IN
MOMENT REDUCTION RATIO  (2  TRIAL) ..... .           98
REDUCED DESIGN MOMENT.  .  .  .  .  .  .....   1212584 75  IN-LB/FT.
SECTION MODULUS OF PILE REQUIRED  .....  .       37 89  CU IN
REDUCED PILE SECTION.....  .  .  .  .  .  .         MZ 32
      OF SECTION MODULUS  . . ..... .  .  .        38 30  CU.IN
ANCHOR ROD AREA AT SPACING10.00 FT.....  .         5 36  SQ IN.
MAXIMUM MOMENT OF WALE (RIGID CONNECTION)     1609312 00  IN-LB.
SECTION MODULUS OF WALE REQUIRED . .... ...      50.29  CU.IN
USE WALE SECTION, 2 OF .  .. ... .....        12U 30.00
```

Port & Marine

- Terminal and Harbor Structures
- Piers
- Wharves
- Bulkheads
- Breakwaters
- Jetties
- Land Reclamation
- Shipyard Facilities
- Marinas

Photos:

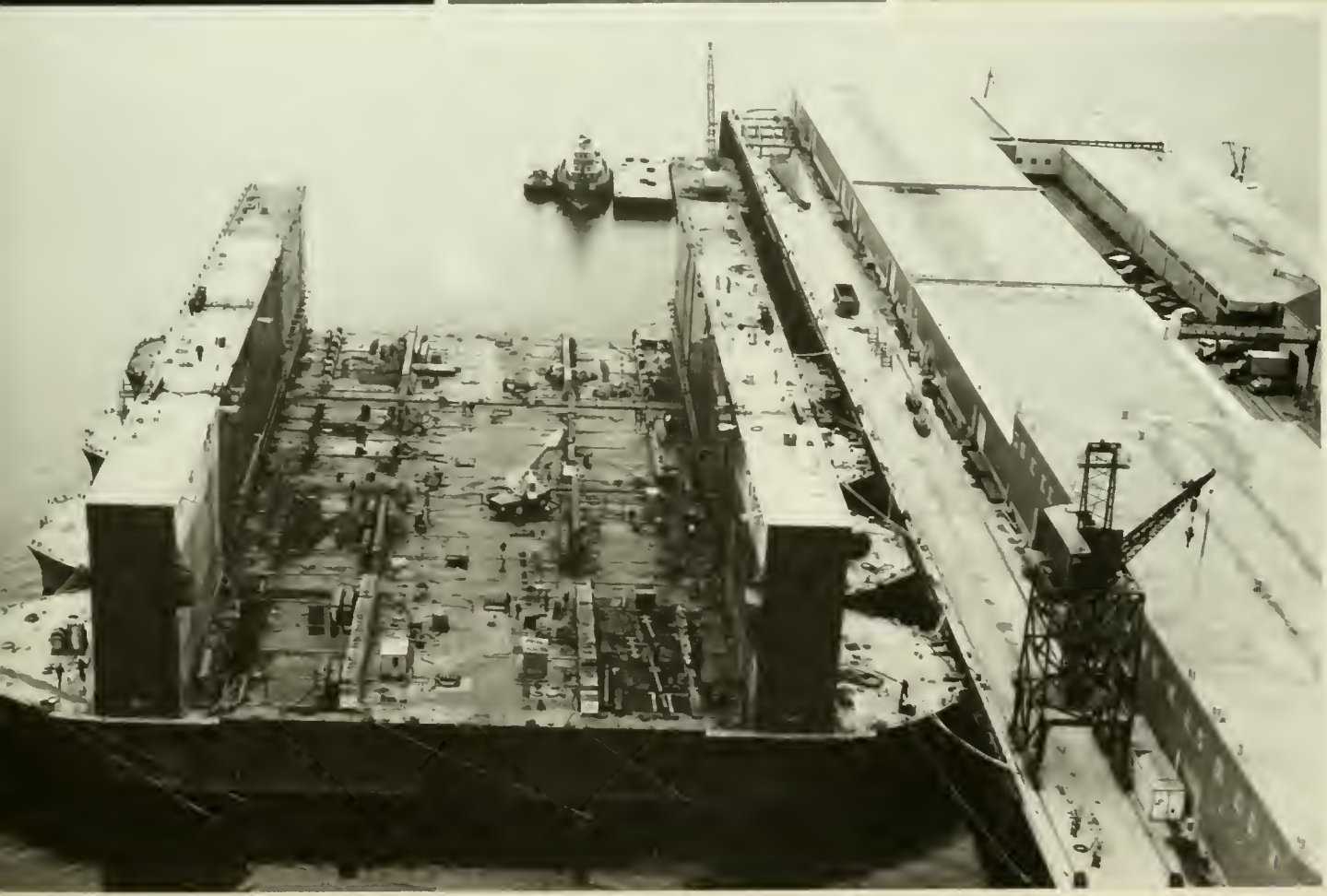
1. Wharf Extension, New Hampshire Port Authority, Portsmouth, NH
2. New Marine Terminal Under Construction, Massachusetts Port Authority, (MASSPORT), South Boston, MA
3. Chubbs Wharf, Mystic Seaport Museum, Mystic, CT
4. New Ocean Terminal Under Construction, Nigerian Ports Authority, Onne, Nigeria

Engineering Facilities

- Warehousing
- Roads
- Railroads
- Bridges
- Freezer/Cold Storage
- Utilities
- Fish Processing
- Fuel Storage
- Total Support Infrastructure

Photos:

1. Middletown Waterfront Park, Middletown, CT
2. Wharf Rehabilitation and Extension, Providence Port Authority, Providence, RI
3. Pier Rehabilitation, Dow Chemical Co., Gales Ferry, CT
4. State Pier Rehabilitation, Ship Repair Facility, Bath Iron Works, Portland, ME



Municipal Marine Services

- Condition Surveys
- Construction Inspection
- Diver Services
- Hydrographic Surveys
- Ocean Engineering
- Marine Foundations
- Geotechnical Engineering
- Architecture
- Mechanical Engineering
- Electrical Engineering
- Shore Protection
- Dredging
- Subaqueous Pipelines
- Environmental Studies
- Computer Modeling and Analysis
- Computer Aided Design and Drafting
- Permits

Photos:

1. Maguire Diver Inspection.
2. Twin 32-inch Subaqueous Pipeline Construction, Providence River Crossing, Providence-East Providence, RI
3 & 4. Hydrographic Surveying
5. Riprap/Shore Protection Under Construction, Scituate, MA

The Maguire Group

The combined professional service capabilities of CE Maguire, Inc., LBC&W, Inc., Maguire/Beebe and Maguire/Bosworth, Inc., form one of the most comprehensive architectural, engineering, planning and construction supervision firms in the nation . . . THE MAGUIRE GROUP. Operating from numerous domestic and international offices, The Maguire Group provides specialized services worldwide to meet the needs of government, business and industry. Each member company is a full-service firm and has the in-house capabilities necessary to execute a project from its conception through completion. The Maguire Group provides its clients with effective, efficient and personal solutions to all project requirements . . . economic, environmental, architectural, engineering, social and aesthetic.

The Maguire Group

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617/451-6649

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703/998-0111

DeSoto, Texas 75115
911 North Hampton
214/223-5379

MAGUIRE/BEEBE

Spartanburg, South Carolina 29304
Box 2646
364 South Pine Street
803/585-0185

Florence, South Carolina 29504
1524 South Siesta Drive
803/669-4491

Charlotte, North Carolina 28210
Suite 203
421 Minuet Lane
704/523-8028

MAGUIRE/BOSWORTH, INC.

Clearwater, Florida 33516
1002 South Fort Harrison Avenue
813/443-4591

LBC&W, INC.

Falls Church, Virginia 22041
5203 Leesburg Pike
Two Skyline Place
703/998-0100

CE MAGUIRE INTERNATIONAL, INC.

Waltham, Massachusetts 02254
60 First Avenue
617/890-0100

Falls Church, Virginia 22041
5203 Leesburg Pike
Two Skyline Place
703/998-0111

P.B. 3414
Douala, Cameroon
West Africa

24 Strachen Street
Lagos, Nigeria
West Africa

P.B. 6183
Port Harcourt, Nigeria
West Africa

THE MAGUIRE GROUP

MAGUIRE GROUP

Standard Form (SF) 254 Architect - Engineer and Related Services Questionnaire

Civil

Address	Telephone	Personnel
Providence, RI 02903, One Davol Square	(401) 272-6000	150
Waltham, MA 02254, 60 First Avenue	(617) 890-0100	88
New Britain, CT 06051, One Court Street	(203) 224-9141	137
Pittsburgh, PA 15219, 1301 Manor Building, 564 Forbes Avenue	(412) 281-6393	8
Falls Church, VA 22041, 5203 Leesburg Pike Architecture, Suite 200 Engineering, Suite 207	 (703) 998-0100 (703) 998-0111	52
Virginia Beach, VA 23452, 770 Lynnhaven Pkwy., Suite 240	(804) 463-8770	45
Honolulu, HI 96814, 1600 Kapiolani Boulevard	(808) 949-2047	6
Phoenix, AZ 85021, Corporate Center, 10010 N. 25th Drive	(602) 944-4666	2
Dallas, TX 75247, Suite 210, Empire Plaza II, 1440 Empire Central	(214) 631-1657	2
Houston, TX 77057, Suite 336, 5701 Woodway	(713) 782-2088	2
Wayne, NJ 07470, 401 Hamburg Turnpike, Suite 101	(201) 942-4811	20
Atlanta, GA 30341, 2900 Chamblee-Tucker Road, Building 6	(404) 455-9375	20

STANDARD FORM (SF)

254

Architect-Engineer and Related Services Questionnaire

1. Firm Name / Business Address:

Maguire Group Inc.
One Davol Square
Providence, Rhode Island 02903

1a. Submittal is for ☒ Parent Company ☐ Branch or Subsidiary Office

2. Year Present Firm Established: 1938

3. Date Prepared: July 1, 1987

4. Corporation

A. Small Business
B. Small Disadvantaged Business
C. Woman-owned Business

5. Name of Parent Company, if any:

N/A

5a. Former Parent Company Name(s), if any, and Year(s) Established:

CE Maguire, Inc. — 1979
C-E Maguire, Inc. — 1970
Charles A. Maguire, Inc. — 1968
LBC&W — 1948
Charles A. Maguire & Associates — 1938

6. Names of not more than Two Principals to Contact: Title / Telephone

1) Vincent M. Cangiano, P.E., President (203) 224-9141
2) Richard J. Repeta, P.E., Executive Vice President (203) 224-9141

7. Present Offices: City / State / Telephone / No. Personnel Each Office

7a. Total Personnel 532

FOR A COMPLETE LISTING, SEE ABOVE.

8. Personnel by Discipline: *(List each person only once, by primary function.)*

88	Administrative	7	Electrical Engineers	4	Oceanographers	12	Word Processing
40	Architects	1	Estimators	14	Planners: Urban/Regional	10	Port/Marine Engineers
0	Chemical Engineers	0	Geologists	40	Sanitary Engineers	7	Contract Administrators
48	Civil Engineers	6	Hydrologists	5	Soils Engineers	7	Computer Programmers
41	Construction Inspectors	3	Interior Designers	2	Specification Writers	1	Graphics
83	Draftsmen	4	Landscape Architects	31	Structural Engineers	2	Photogrammetrists
0	Ecologists	18	Mechanical Engineers	4	Surveyors	3	Traffic
1	Economists	0	Mining Engineers	42	Transportation Engineers	8	Others

9. Summary of Professional Services Fees Received: (Insert index number)

	Last 5 Years (most recent year first)				
	19 86	19 85	19 84	19 83	19 82
Direct Federal contract work, including overseas	6	7	7	7	6
All other domestic work	8	8	8	8	8
All other foreign work*	0	4	4	5	6

*Firms interested in foreign work, but without such experience, check here: ☐.

Ranges of Professional Services Fees

INDEX
1 Less than $100,000
2 $100,000 to $250,000
3 $250,000 to $500,000
4 $500,000 to $1 million
5 $1 million to $2 million
6 $2 million to $5 million
7 $5 million to $10 million
8 $10 million or greater

10. Profile of Firm's Project Experience, Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 005	4	1,250	11) 048	33	4,100	21) 089	69	3,000
2) 006	6	6,020	12) 049	20	1,400	22) 090	23	5,200
3) 011	76	8,450	13) 050	74	2,860	23) 096	355	26,700
4) 021	284	24,000	14) 052	30	1,700	24) 099	35	900
5) 029	23	2,700	15) 058	18	2,800	25) 102	60	560
6) 032	21	1,200	16) 072	63	4,700	26) 104	28	2,400
7) 033	44	5,400	17) 079	78	2,100	27) 107	42	1,500
8) 039	29	1,950	18) 083	98	4,300	28) 109	6	2,640
9) 042	71	5,900	19) 084	7	1,500	29) 110	18	2,000
10) 046	130	22,000	20) 087	6	1,100	30) 115	220	11,500

11. Project Examples, Last 5 Years

Profile Code	"P", "C", "JV", or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
005	P	1 Airfield Improvements U.S. Marine Corps Air Station Kaneohe, Oahu, Hawaii	Naval Facilities Engineering Command Pacific Division Pearl Harbor, Hawaii	29,000	1986
006	JV	2 Bradley International Airport Windsor Locks, Connecticut	Connecticut Department of Transportation Hartford, Connecticut	100,000	1986
011	P	3 Chicopee River Bridge Chicopee, Massachusetts	Cities of Chicopee and Springfield, Massachusetts	8,000	1990
011	P	4 Bridge Rehabilitation/Replacement Program Statewide, Massachusetts	Massachusetts Department of Public Works Boston, Massachusetts	30,000	1987
011	P	5 I-264 Interchange Norfolk, Virginia	Virginia Department of Transportation Richmond, Virginia	16,000	1989
011	P	6 Dexter Coffin Bridge Enfield - Windsor Locks, Connecticut	Connecticut Department of Transportation Wethersfield, Connecticut	21,000	1991
021	P	7 Bradley Hotel Windsor Locks, Connecticut	Floyd Bank International, Ltd. New York, New York	25,000	1987

021	P	8 Wastewater Treatment Facilities New Haven, Connecticut	City of New Haven New Haven, Connecticut	37,000	1990
029	P	9 Northern Community College 3 Campuses Alexandria and Manassas, Virginia	Commonwealth of Virginia Richmond, Virginia	35,000	1985
039	P	10 Harvard Square Parking Garage Cambridge, Massachusetts	Louis DiGiovanni Cambridge, Massachusetts	5,000	1985
042	P	11 Ship Repair Facility Portland, Maine	Bath Iron Works Portland, Maine	46,700	1983
042	P	12 Massport Marine Terminal Naval Annex South Boston, Massachusetts	Massachusetts Port Authority Boston, Massachusetts	40,000	1986
042	P	13 Christopher Newport Park Waterfront Improvements Newport News, Virginia	City of Newport News, Virginia	8,000	1988
046	P	14 Civic Center & Capital Center Projects Providence, Rhode Island	Rhode Island Department of Transportation Providence, Rhode Island	67,000	1987
046	P	15 Intersection I-93/Route 16 Interchange Medford, Massachusetts	Massachusetts Department of Public Works Boston, Massachusetts	15,000	1987
046	P	16 Interstate 287 Widening Interstate 78 to Morristown, New Jersey	New Jersey Department of Transportation Trenton, New Jersey	30,000	1988
046	P	17 Southeastern Expressway Virginia Beach Area, Virginia	Virginia Department of Transportation Richmond, Virginia	200,000	1991
048	P	18 Norwalk Hospital Norwalk, Connecticut	Norwalk Hospital Norwalk, Connecticut	31,000	1987
049	P	19 Tysons Corner Sheraton Hotel and Conference Center McLean, Virginia	SRS Joint Venture Bethesda, Maryland	40,000	1986

052	P	20 Systems Processing Facility Fort Meade, Maryland	U.S. Army Corps of Engineers Baltimore, Maryland	12,000	1985
072	P	21 State Office Building Providence, Rhode Island	Rhode Island Public Building Authority Providence, Rhode Island	22,000	1987
083	P	22 27 Miles 138 KV Line Two Sub-Stations	City Electric Systems Key West, Florida	22,000	1986
087	JV	23 MRTCA 195 Wilshire-Vermont Stations Los Angeles, California	Southern California Rapid Transit District Los Angeles, California	30,000	1987
090	P	24 2000 TPD Resource Recovery Facility Hartford, Connecticut	Combustion Engineering, Inc. Windsor, Connecticut	154,000	1987
096	P	25 Preliminary Engineering Study PA-LI Wastewater Treatment Plant Taipei, Taiwan	Taiwan Housing and Urban Development Bureau Taipei, Taiwan	600,000	1989
096	P	26 Advanced Wastewater Treatment Plant Meriden, Connecticut	City of Meriden, Connecticut	30,000	1985
096	P	27 Phase VI and VII Sewer Separations Cambridge, Massachusetts	City of Cambridge, Massachusetts	10,000	1990
096	P	28 Storm and Sewage Separation Gravity Sewer Force Main and Pump Station Norwich, Connecticut	Norwich Public Utilities Norwich, Connecticut	64,000	1986
109	P	29 Greenbelt Route Subway Section E-2 Washington, DC	Washington Metro Area Transit Authority Washington, DC	75,000	1987
115	P	30 Lake Gaston Water Supply Project Project Management & Preliminary Final Designs Virginia Beach, Virginia	City of Virginia Beach, Virginia	185,000	1992

12. The foregoing is a statement of facts

Signature: Vincent M. Cangiano

Typed Name and Title: VINCENT M. CANGIANO, PRESIDENT

Date: July 1, 1987

Experience Profile Code Numbers for use with questions 10 and 11

001 Acoustics; Noise Abatement
002 Aerial Photogrammetry
003 Agricultural Development; Grain Storage; Farm Mechanization
004 Air Pollution Control
005 Airports; Navaids; Airport Lighting; Aircraft Fueling
006 Airports; Terminals & Hangars; Freight Handling
007 Arctic Facilities
008 Auditoriums & Theatres
009 Automation; Controls; Instrumentation
010 Barracks; Dormitories
011 Bridges
012 Cemeteries *(Planning & Relocation)*
013 Chemical Processing & Storage
014 Churches; Chapels
015 Codes; Standards; Ordinances
016 Cold Storage; Refrigeration; Fast Freeze
017 Commercial Buildings *(low rise);* Shopping Centers
018 Communications Systems; TV; Microwave
019 Computer Facilities; Computer Service
020 Conservation and Resource Management
021 Construction Management
022 Corrosion Control; Cathodic Protection; Electrolysis
023 Cost Estimating
024 Dams *(Concrete; Arch)*
025 Dams *(Earth; Rock);* Dikes; Levees
026 Desalinization *(Process & Facilities)*
027 Dining Halls; Clubs; Restaurants
028 Ecological & Archeological Investigations
029 Educational Facilities; Classrooms
030 Electronics
031 Elevators; Escalators; People-Movers
032 Energy Conservation; New Energy Sources
033 Environmental Impact Studies, Assessments or Statements
034 Fallout Shelters; Blast-Resistant Design
035 Field Houses; Gyms; Stadiums
036 Fire Protection
037 Fisheries; Fish Ladders
038 Forestry & Forest Products
039 Garages; Vehicle Maintenance Facilities; Parking Decks
040 Gas Systems *(Propane; Natural, Etc.)*
041 Graphic Design
042 Harbors; Jetties; Piers; Ship Terminal Facilities
043 Heating; Ventilating; Air Conditioning
044 Health Systems Planning
045 Highrise; Air-Rights-Type Buildings
046 Highways; Streets; Airfield Paving, Parking Lots
047 Historical Preservation
048 Hospital & Medical Facilities
049 Hotels, Motels
050 Housing *(Residential, Multi-Family; Apartments; Condominiums)*
051 Hydraulics & Pneumatics
052 Industrial Buildings; Manufacturing Plants
053 Industrial Processes; Quality Control
054 Industrial Waste Treatment
055 Interior Design; Space Planning
056 Irrigation; Drainage
057 Judicial and Courtroom Facilities
058 Laboratories; Medical Research Facilities
059 Landscape Architecture
060 Libraries; Museums; Galleries
061 Lighting *(Interiors; Display; Theatre, Etc.)*
062 Lighting *(Exteriors; Streets; Memorials; Athletic Fields, Etc.)*
063 Materials Handling Systems; Conveyors; Sorters
064 Metallurgy
065 Microclimatology; Tropical Engineering
066 Military Design Standards
067 Mining & Mineralogy
068 Missile Facilities *(Silos; Fuels; Transport)*
069 Modular Systems Design; Pre-Fabricated Structures or Components
070 Naval Architecture; Off-Shore Platforms
071 Nuclear Facilities; Nuclear Shielding
072 Office Buildings; Industrial Parks
073 Oceanographic Engineering
074 Ordnance; Munitions; Special Weapons
075 Petroleum Exploration; Refining
076 Petroleum and Fuel *(Storage and Distribution)*
077 Pipelines *(Cross-Country—Liquid & Gas)*
078 Planning *(Community, Regional, Areawide and State)*
079 Planning *(Site, Installation, and Project)*
080 Plumbing & Piping Design
081 Pneumatic Structures; Air-Support Buildings
082 Postal Facilities
083 Power Generation, Transmission, Distribution
084 Prisons & Correctional Facilities
085 Product, Machine & Equipment Design
086 Radar; Sonar; Radio & Radar Telescopes
087 Railroad; Rapid Transit
088 Recreation Facilities *(Parks, Marinas, Etc.)*
089 Rehabilitation *(Buildings, Structures, Facilities)*
090 Resource Recovery; Recycling
091 Radio Frequency Systems & Shieldings
092 Rivers; Canals; Waterways; Flood Control
093 Safety Engineering, Accident Studies; OSHA Studies
094 Security Systems; Intruder & Smoke Detection
095 Seismic Designs & Studies
096 Sewage Collection, Treatment and Disposal
097 Soils & Geologic Studies; Foundations
098 Solar Energy Utilization
099 Solid Wastes; Incineration; Land Fill
100 Special Environments; Clean Rooms, Etc.
101 Structural Design; Special Structures
102 Surveying, Platting, Mapping; Flood Plain Studies
103 Swimming Pools
104 Storm Water Handling & Facilities
105 Telephone Systems *(Rural; Mobile, Intercom, Etc.)*
106 Testing & Inspection Services
107 Traffic & Transportation Engineering
108 Towers *(Self-Supporting & Guyed Systems)*
109 Tunnels & Subways
110 Urban Renewals; Community Development
111 Utilities *(Gas & Steam)*
112 Value Analysis; Life-Cycle Costing
113 Warehouses & Depots
114 Water Resources; Hydrology; Ground Water
115 Water Supply, Treatment and Distribution
116 Wind Tunnels; Research/Testing Facilities Design
117 Zoning, Land Use Studies
201
202
203
204
205

MAGUIRE
GROUP

FORM (SF)

254

Architect-Engineer and Related Services Questionnaire

John Gaythwaite, P.E.
Consulting Engineer
155 Pine Street
Manchester, MA. 01944

Established: 1982

1 Feb. 1987

4. Specify type of ownership *and* check below, if applicable.
Proprietorship

- [X] A. Small Business
- [ ] B. Small Disadvantaged Business
- [ ] C. Woman-owned Business

1a. Submittal is for ☒ Parent Company ☐ Branch or Subsidiary Office N/A

5. Name of Parent Company, if any:
N/A

5a. Former Parent Company Name(s), if any, and Year(s) Established:
N/A

6. Names of not more than Two Principals to Contact: Title / Telephone
1) John Gaythwaite, Consulting Engineer/617-526-4071
2)

7. Present Offices: City / State / Telephone / No. Personnel Each Office

Manchester, MA./617-526-4071/1

7a. Total Personnel 1

NOTE: Utilize part-time personnel and subconsultants as required by project

8. Personnel by Discipline: *(List each person only once, by primary function.)*

___ Administrative	___ Electrical Engineers	___ Oceanographers	1 Civil/Ocean/Structural
___ Architects	___ Estimators	___ Planners: Urban/Regional	
___ Chemical Engineers	___ Geologists	___ Sanitary Engineers	
___ Civil Engineers	___ Hydrologists	___ Soils Engineers	
___ Construction Inspectors	___ Interior Designers	___ Specification Writers	
___ Draftsmen	___ Landscape Architects	___ Structural Engineers	
___ Ecologists	___ Mechanical Engineers	___ Surveyors	
___ Economists	___ Mining Engineers	___ Transportation Engineers	

9. Summary of Professional Services Fees Received: (Insert index number)

Last 5 Years (most recent year first)

	19 86	19 85	19 84	19 83	19 82
Direct Federal contract work, including overseas	0	0	0	0	0
All other domestic work	1	1	1	1	1
All other foreign work*	0	0	0	0	0

*Firms interested in foreign work, but without such experience, check here: ☒

Ranges of Professional Services Fees

INDEX
1. Less than $100,000
2. $100,000 to $250,000
3. $250,000 to $500,000
4. $500,000 to $1 million
5. $1 million to $2 million
6. $2 million to $5 million
7. $5 million to $10 million
8. $10 million or greater

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 011	1	5	11)			21)		
2) 042	20	100	12)			22)		
3) 070	2	30	13)			23)		
4) 073	7	30	14)			24)		
5) 089	3	9	15)			25)		
6) 095	2	30	16)			26)		
7) 097	1	16	17)			27)		
8) 101	6	50	18)			28)		
9) 104	1	5	19)			29)		
10)			20)			30)		

11. Project Examples, Last 5 Years

Profile Code	"P", "C", "JV", or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
011	C	1 Bridge Type Study - 2 lane Highway Bridge Uxbridge, MA.	Mass. DPW Nashua St. Boston, MA.	250	1980
042	P	2 Design 50 ton Marine Railway Manchester, MA.	Manchester Marine Corp. Ashland Ave. Manchester, MA.	20	1981
042	C	3 Portland Ship Repair Facility Portland, ME.	Bath Iron Works Corp. 700 Washington St. Bath, ME.	15,000	1983
042	P	4 Pier Expansion Feasibility Study Narragansett, R.I.	University of R.I./Graduate School of Oceanography Saunderstown, R.I.	700	1983
042	C	5 Spinnaker Island Marina Pier Design Hull, MA.	Sandcastle Associates Beach St. Hull, MA.	100	1984
042	P	6 Ro-Ro Barge Loading Facility incl. dredging & site work Lynn, MA.	General Electric Co. 1100 Western Ave. Lynn, MA. 01910	2,000	198?
042	P	7 Timber Boat Dock Cambridge, MA.	Mass. Inst. of Technology Physical Plant Cambridge, MA. 02139	150	1987

042	C	Commercial Floating Dock Facility & Dolphins Gloucester, MA.	City of Gloucester Gloucester, MA. 01930	200	1986
042	P	9 30 Ton Capacity Travel Pier Manchester, MA.	Crockers Boat Yard Ashland Ave. Manchester, MA. 01944	50	1985
042	P	10 Material Condition Survey of and Evaluation of 460' and 520' Wharves, Bath, ME.	Bath Iron Works Corp. 700 Washington St. Bath, ME. 04530	-	1986
042	P	11 Material Condition Survey of 600' outfitting pier Bath, ME.	Bath Iron Works Corp. 700 Washington St. Bath, ME. 04530	-	1985
070	C	12 Spinnaker Island Marina Floating Breakwater Hull, MA.	Sandcastle Associates Beach St. Hull, MA. 02045	250	1983
070	I.E.	13 81,000 ton capacity Floating Dry Dock Portland, OR.	Port of Portland Portland, OR. 97200	23,000	1978
073	P	14 Mooring System for Large Floating Dry Dock Portland, ME.	Bath Iron Works Corp. 700 Washington St. Bath, ME. 04530	30	1983
073	P	15 Seawall Evaluation and Repairs Marblehead, MA.	Mr. & Mrs. Douglas Nagan Atlantic Ave. Marblehead, MA. 01945	20	1983
073	P	16 Tidal Flood & Design Criteria for 7 story condominium Jamestown, R.I.	Jamestown Bay View Condominiums 47 Canonicus Ave. Jamestown, R.I. 02835	-	1986
073	P	17 Tidal Flood & Hydraulic Study Nantasket, MA.	Kahn/Quinn Group, Ltd. 444 Washington St. Woburn, MA. 01801	-	1986
073	P	18 Wave Climate Study Collins Cove Salem, MA.	Gulf of Maine Research Corp. 29 Congress St. Salem, MA. 01920	--	1985
073	C	19 Design Criteria Study for Commercial Fish Pier Lynn, MA.	City of Lynn Lynn, MA. 01910	-	1987

089	P	Club Facilities Cambridge, MA.	Memorial Drive	15	1984
089	C	21 North Jetty Rehabilitation So. Boston, MA.	Mass. Port Authority High St. Boston, MA.	2,000	1985
089	P	22 Rehabilitation of Yacht Club Deck Marblehead, MA.	Boston Yacht Club Front St. Marblehead, MA. 01945	50	1987
095	P	23 Investigation of Seismic Effects on Floating Drydock Portland, ME.	Bath Iron Works Corp. Washington St. Bath, ME.	28	1984
095	C	24 Seismic & Lateral Load Analysis of Concrete Bldg. Boston, MA.	C.E.Maguire, Inc. First Ave. Waltham, MA.	5	1980
097	P	25 South Yard Expansion - Land Fill Bath, ME.	Bath Iron Works Corp. Washington St. Bath, ME.	1,000	198-
101	C	26 Wind Effects on 130' steel Chimney Waltham, MA.	Polaroid Corp. Waltham, MA.	5	1980
101	C	27 Floating Log Boom Investigation Boston, MA.	Mass. Port Authority High St. Boston, MA.	1	1984
101	P	28 Structural Investigation of steel storage racks Kearny, N.J.	Congoleum Corp. Trenton, N.J.	1,000	1985
101	JV	29 Craneway for 300 ton shipyard Gantry Crane Bath, ME.	Bath Iron Works Corp. 700 Washington St. Bath, ME. 04530	2,000	1987
104	C	30 Storm Water Storage Facility Marlborough, MA.	Rosewood Dev. Corp. Old Conn. Path Framingham, MA.	80	1983

12. The foregoing is a statement of facts

Date: 1 Feb. 1987

Signature: _____ Typed Name and Title: John Gaythwaite/Consulting Eng'r

FORM (SF) **254**
Architect-Engineer and Related Services Questionnaire

J.Walter Brain & Associates
Landscape Architects & Urban Designers
101 Commonwealth Ave., Concord, Mass. 01742

1a. Submittal is for ☐ Parent Company ☐ Branch Office

2. Year Present Firm Established: 1972

3. Date Prepared: Dec.10,1986

4. Type of Ownership:

4a. Minority Owned ☒ yes ☐ no

5. Name of Parent Company, if any: –

5a. Former Firm Name(s), if any, and Year(s) Established: –

6. Names of not more than Two Principals to Contact: Title / Telephone

1) J.Walter Brain, Owner, (617) 369-3934
2)

7. Present Offices: City / State / Telephone / No. Personnel Each Office

7a. Total Personnel 4 in 1986

Same as above

8. Personnel by Discipline:

___ Administrative	___ Electrical Engineers	___ Oceanographers	___
___ Architects	___ Estimators	___ Planners: Urban/Regional	___
___ Chemical Engineers	___ Geologists	___ Sanitary Engineers	___
___ Civil Engineers	___ Hydrologists	___ Soils Engineers	___
___ Construction Inspectors	___ Interior Designers	___ Specification Writers	___
2 Draftsmen	2 Landscape Architects	___ Structural Engineers	___
___ Ecologists	___ Mechanical Engineers	___ Surveyors	___
___ Economists	___ Mining Engineers	___ Transportation Engineers	___

9. Summary of Professional Services Fees Received: (insert index number)

Last 5 Years (most recent year first)

	19 86	19 85	19 84	19 83	19 82
Direct Federal contract work, including overseas					
All other domestic work	1	1	1	1	1
All other foreign work*					

*Firms interested in foreign work, but without such experience, check here: ☒.

Ranges of Professional Services Fees

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6. $2 million to $5 million
7. $5 million to $10 million
8. $10 million or greater

Standard Form 254 July 1975
Prescribed By GSA Fed. Proc. Reg. (41 CFR) 1-16.803

10. Profile of Firm's Project Experience, Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 059	30	150	11) 056			21)		
2) 046	6	90	12) 062			22)		
3) 088	6	50	13) 079			23)		
4) 042	2	25	14) 104			24)		
5) 033	5	20	15) 117			25)		
6) 005	1	17	16) 041			26)		
7)			17) 047			27)		
8)			18)			28)		
9)			19)			29)		
10)			20)			30)		

Categories of these profiles codes are a component part of most projects included and listed under profile codes from #1 to #6.

11. Project Examples, Last 5 Years

Profile Code	"P", "C", "JV", or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
033 088	C	[1] Parkland Impact Analysis on Proposed Combined Sewer Overflow Project. Boston, Mass.	Metropolitan District Commission Boston, Mass.	N/A	1981
059 088	P	[2] Fort Revere Historical Park Hull, Mass.	Town of Hull Office of Community Development Hull, Mass. 02045	60	1981
059 088	C	[3] Andover Schools Playing Fields Andover, Mass.	Town of Andover Andover, Mass.	1000*	1982
042 059	C	[4] Steamboat Wharf Nantucket Ferry Terminal	Nantucket Steamship Authority Nantucket, Mass.	300*	1983
005 046	C	[5] Logan International Airport Access Gateway Boston, Mass.	Massachusetts Port Authority Ten Park Plaza Boston, Mass. 02116	750*	1983 & 1986
059	P	[6] Chaisson's Cove Condominiums Swampscott, Mass.	Chaisson Development Corp. 555 Humphrey Street Swampscott, Mass. 01907	60	1984
059	C	[7] Concord Waste Water Treatment Plant Concord, Mass.	Town of Concord Concord, Mass. 01742	500*	1985

* Cost of work for which firm was responsible as consultant to prime

Standard Form 254 July 1975
Prescribed By GSA Fed Proc. Reg (41 CFR) 1-16 P03

		Clinton, Mass.		600*	1985
059 046 088	P	[9] Lakeside Apartments Site Modernization, Worcester, Mass.	Worcester Housing Authority Modernization Office 25 Meade St.,Worcester, Ma.01610	620	1985
059 046	C	[10] North Street Housing Site Modernization, Worcester, Mass.	Worcester Housing Authority Moderinization Office 25 Meade St.,Worcester, Ma.01610	262*	1985
059 046	P	[11] Central Business District Sidewalks Improvements Middleborough, Mass.	Town of Middleborough Community Development Office Middleborough, Mass. 02346	200	1985
059	C	[12] Greek Orthodox Church of the Annunciation Newburyport, Mass.	Greek Orthodox Church Newburyport, Mass.	50*	1985
059	P	[13] Whimbrel Meadows Cluster Devel. Ipswich, Mass.	Phoenix Development Corp. 29B Hudson Road Sudbury, Mass.01776	100	1986-87
059	P	[14] Acton Industrial Park Acton, Mass.	Ledgewood Associates 29B Hudson Road Sudbury, Mass. 01776	150	1986
046 059	C	[15] N.H. Yankee Corporate Office Headquarters, Seabrook, N.H.	N.H. Yankee P.O.Box 700 Seabrook, N.H. 03874	600*	1986
059 046 088	P	[16] Market Square Amesbury, Mass.	Dpt.Administration & Development Town of Amesbury, Town Hall Amesbury, Mass. 01913	400	1986-87
059 088	P	[17] Watertown Housing Authority Site Modernization Watertown, Mass.	Watertown Housing Authority 55 Waverley Avenue Watertown, Mass. 02172	400	Current
042 059	C	[18] Pier # 10 Rehabilitation Boston, Mass.	E.D.I.C. Boston Marine Industrial Park Boston, Mass.	120*	Current
059	C	[19] Newburyport Cooperative Bank Newburyport, Mass.	Newburyport Cooperative Bank Newburyport, Mass. 01950	200*	Current

* Cost of work for which firm was responsible as consultant to prime.

Standard Form 254 July 1975
Prescribed By GSA Fed. Proc. Reg (41 CFR) 1-16.803

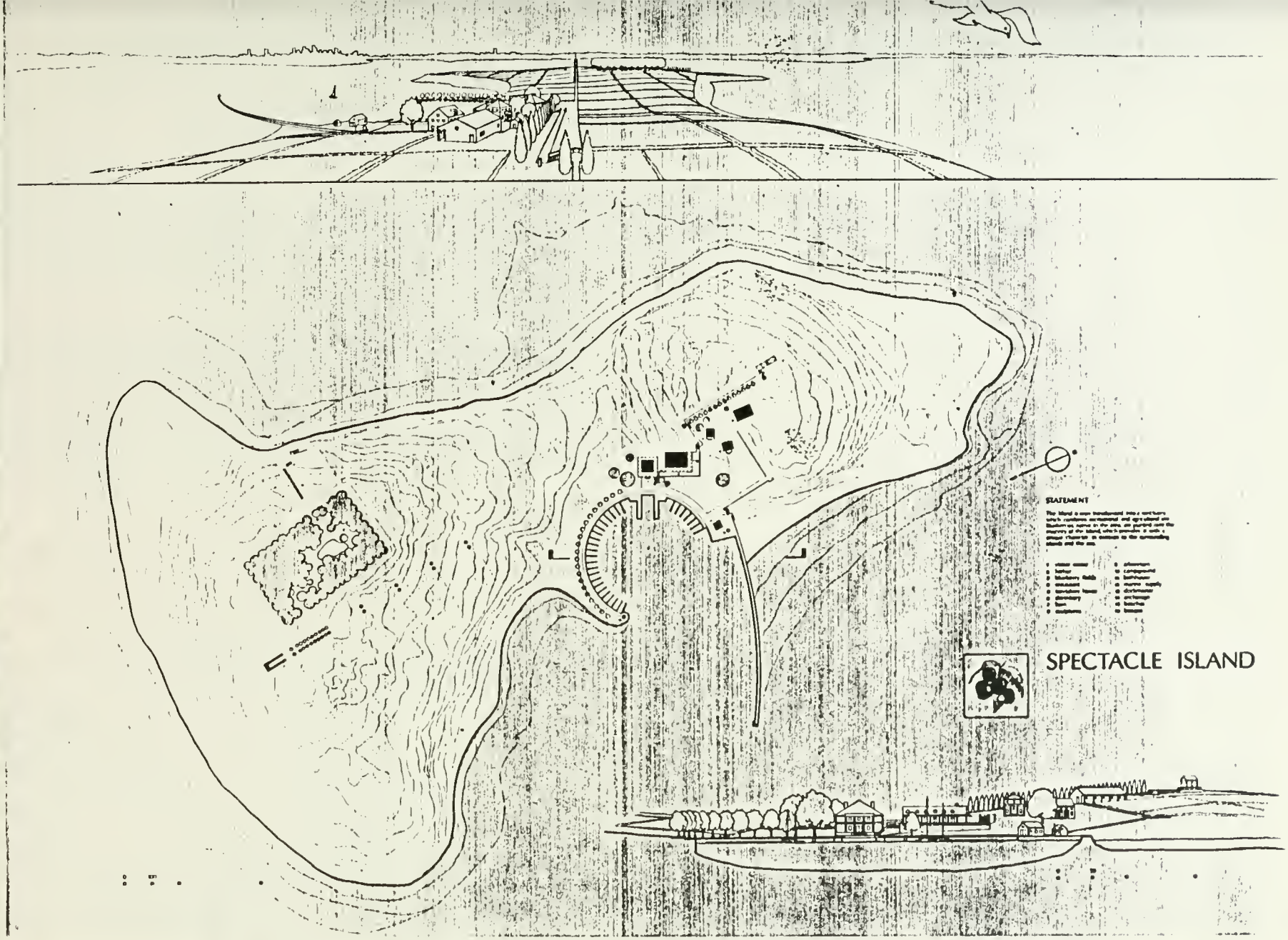
059 046	P	20 Sterling Housing Authority Site Modernization Sterling, Mass.	Sterling Housing Authority Sterling Junction, Mass. 01565	200	Current
		21			
		22			
		23			
		24			
		25			
		26			
		27			
		28			
		29			
		30			

12. The foregoing is a statement of facts

Signature: J. Walter Brain Typed Name and Title: J.Walter Brain

Date: December 10, 1986

Standard Form 254 July 1975
Prescribed By GSA Fed. Proc. Reg. (41 CFR) 1-16.803


STATEMENT
SPECTACLE ISLAND

STANDARD FORM (SF)

254

Architect-Engineer and Related Services Questionnaire

1. Firm Name / Business Address:

LIN ASSOCIATES, INC.
2001 Beacon Street
Boston, MA. 02146

1a. Submittal is for ☒ Parent Company ☐ Branch or Subsidiary Office

2. Year Present Firm Established: 1978

3. Date Prepared: Nov. 5, 1987

4. Specify type of ownership *and* check below, if applicable.

Corporation DUNS #04-640-5916

- [ ] A. Small Business
- [X] B. Small Disadvantaged Business
- [ ] C. Woman-owned Business

5. Name of Parent Company, if any:

5a. Former Parent Company Name(s), if any, and Year(s) Established:

LIN ASSOCIATES 1977

6. Names of not more than Two Principals to Contact: Title / Telephone

1) Chan K. Lin, President (617) 566-4216
2) Robert D. Buckley, Vice President 566-4216

7. Present Offices: City / State / Telephone / No. Personnel Each Office

7a. Total Personnel 21

2001 Beacon Street
Boston, MA. 02146

(617) 566-4216

8. Personnel by Discipline: *(List each person only once, by primary function.)*

1 Administrative	___ Electrical Engineers	___ Oceanographers	___
2 Architects	___ Estimators	___ Planners: Urban/Regional	___
___ Chemical Engineers	___ Geologists	___ Sanitary Engineers	___
4 Civil Engineers	___ Hydrologists	___ Soils Engineers	___
___ Construction Inspectors	___ Interior Designers	___ Specification Writers	___
4 Draftsmen	___ Landscape Architects	8 Structural Engineers	___
___ Ecologists	___ Mechanical Engineers	2 Surveyors	___
___ Economists	___ Mining Engineers	___ Transportation Engineers	___

9. Summary of Professional Services Fees Received: (Insert index number)

	Last 5 Years (most recent year first)				
	19 86	19 85	19 84	19 83	19 82
Direct Federal contract work, including overseas	3	3	3		
All other domestic work	4	4	4	3	3
All other foreign work*					

*Firms interested in foreign work, but without such experience, check here: ☐.

Ranges of Professional Services Fees

INDEX
1. Less than $100,000
2. $100,000 to $250,000
3. $250,000 to $500,000
4. $500,000 to $1 million
5. $1 million to $2 million
6. $2 million to $5 million
7. $5 million to $10 million
8. $10 million or greater

10. Profile of Firm's Project Experience, Last 5 Years

Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)	Profile Code	Number of Projects	Total Gross Fees (in thousands)
1) 006	2	100	11) 048	2	36	21) 087	2	20
2) 007	4	800	12) 049	1	60	22) 089	15	195
3) 008	3	40	13) 050	7	160	23) 090	1	
4) 013	1	20	14) 052	1	8	24) 096	10	240
5) 017	2	65	15) 056	1	10	25) 101	100	4,000
6) 027	2	100	16) 058	1	10	26) 102	12	250
7) 039	3	120	17) 060	2	60	27) 103	1	14
8) 029	1	14	18) 064	1	30	28) 108	2	100
9) 042	2	110	19) 072	6	180	29) 113	2	20
10) 046	21	1,000	20) 084	4		30) 115	6	70

11. Project Examples, Last 5 Years

Profile Code	"P", "C", "JV", or "IE"	Project Name and Location	Owner Name and Address	Cost of Work (in thousands)	Completion Date (Actual or Estimated)
006	C	1 New Unit Terminal & Concourse "C" Bradley International Airport Windsor Locks, CT.	Connecticut Department of Transportation Wethersfield, CT.	20,000	1986
007	P	2 DEW Line Facilities Northern Warning System Canada-Alaska	U.S. Government Corps of Engineers, NY.	20,000	1987
011	P	3 Deck Replacement of 18 Bridge on I-91 in Greenfield, Northampton and Holyoke, Massachusetts	Massachusetts Department of Public Works Boston, Massachusetts	6,000	1988
013	C	4 Integrated Genetics Pilot Laboratory Framingham, MA	Integrated Genetics Framingham, MA	1,700	1986
017	C	5 Nutfield Shopping Center Derry, New Hampshire	Miley Hardware Derry, New Hampshire	1,000	1984
027	P	6 Tatsukichi Restaurant Renovation Boston, MA	Tatsukichi Restaurant Boston, MA	1,000	1981
029	C	7 Addition to Building 1728 Hanscom AFB Bedford, MA	U.S. Air Force	200	1988

039	P	8 Lafayette Place Parking Garage Boston, MA	City of Boston	25,000	1983
042	C	9 Massport Marine Terminal - Phase II Boston Industrial Park, MA	Massachusetts Port Authority Boston, MA	2,000	1982
046	P	10 Roadway at Bridges C-6-12, Charlton, N-13-2 Norfolk, & L-3-1 Lanesborough, Massachusetts	Massachusetts Department of Public Works	2,200	1986
048	C	11 Intermediate Care Facilities for Mentally Retarded, Lexington, Canton, Brockton, Taunton, MA	Divisions of Capital Planning Boston, MA	3,000	1986
049	C	12 Arctic Hotel Sonderstrom AFB, Greenland	U.S. Army Corps of Engineers New York, NY	800	1986
050	P	13 Crystal Manor Condominium Brookline, MA	Crystal Manor Corporation Newton, MA	3,000	1983
052	P	14 Koehler Manufacturing Company Office Addition Marlborough, MA	Koehler Manufacturing Company Marlborough, MA	500	1983
056	C	15 Spencer Drainage Spencer, MA	Town of Spencer MA	500	1985
058	C	16 Integrated Genetic Lab Renovation Addition Framingham, MA	Integrated Genetics Framingham, MA	1,700	1986
060	C	17 Bourne Public Library Bourne, MA	Bourne Public Library Bourne, MA	700	1986
064	C	18 Ferrofluidics Corporation Nashua, New Hampshire	Ferrofluidics Corporation Nashua, New Hampshire	2,500	1985
072	C	19 System Management Engineering Facility Hanscom AFB, MA	U.S. Army Corps of Engineers New York, NY	8,000	1983

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084	C	20 Bristol County Jail and House of Corrections North Dartmouth, MA	Divisions of Capital Planning Boston, MA.	26,000 (est.)	1990 (est.)
087	C	21 WYE Connector Railroad & Bridge South Boston, MA	M.B.T.A. Boston, MA	2,000	1985
089	C	22 Norfolk House Rehabilitation Boston, MA	Ross Associates Boston, MA	1,700	1986
090	C	23 Material Recovery Facilities Springfield and Boston Metropolitan MA	Division of Capital Planning Boston, MA	2,500	Unknown
096	C	24 Westborough Waste Water Treatment Facility Westborough, MA	Town of Westborough MA	26,000	1987
101	C	25 Watervliet Arsenal Hi-Crane Girder Modifications Albany, NY	U.S. Army Corps of Engineer New York, NY	420	1987
102	C	26 Walpole Interceptors and Lateral Sewers Walpole, MA	Town of Walpole MA	800	1986
103	C	27 Storrow Park Swimming Pool Lawrence, MA	Town of Lawrence MA	1,400	1988
108	C	28 Ten Long Range Radar Towers DEW Line North Warning System Canada-Alaska	U.S. Army Corps of Engineers New York, NY	4,000	1986
113	P	29 Shetland Property Salem, MA	Shetland Property, Inc. Salem, MA	200	1987
115	C	30 Barrows Water Treatment Plant Wilmington, MA	Town of Wilmington MA	5,000	1988

12. The foregoing is a statement of facts

Signature: Chan K Lin Typed Name and Title: Chan K. Lin, President

Date: November 10, 1987

* USGPO 1986-491-248/40037

6476 34

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